## U.S. ARMY CORPS OF ENGINEERS CIVIL WORKS PROGRAM

CONGRESSIONAL SUBMISSION FISCAL YEAR 2006

Budgetary information will not be released Outside the Department of the Army until 7 February 2005

# JUSTIFICATION OF ESTIMATE FOR CIVIL FUNCTIONS ACTIVITIES DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

## FISCAL YEAR 2006

## NORTH ATLANTIC DIVISION

## CORPS OF ENGINEERS

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## JUSTIFICATION OF ESTIMATE FOR CIVIL FUNCTION ACTIVITIES DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

## FISCAL YEAR 2006

## SUMMARY, NORTH ATLANTIC DIVISION

	FY 2005 Allocation \$	FY 2006 <u>Request</u> \$	Increase or <u>Decrease</u> \$
General Investigations			
Surveys Preconstruction Engineering and Design	8,463,000 1,500,000	6,145,000 500,000	-2,318,000 -1,000,000
Subtotal General Investigations	(9,963,000)	(6,645,000)	(-3,318,000)
Construction, General			
Construction	184,924,000	150,606,000	-34,318,000
Major Rehabilitation	0	0	0
Dam Safety Assurance	3,233,000	10,310,000	7,077,000
Subtotal Construction, General	(188,157,000)	(160,916,000)	(-27,241,000)
Operation and Maintenance, General			
Project Operation and Maintenance	192,586,000	179,878,000	-12,708,000
Subtotal Operation and Maintenance	(192,586,000)	(179,878,000)	(-12,708,000)
GRAND TOTAL, NORTH ATLANTIC DIVISION	390,706,000	347,439,000	-43,267,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
·	\$	\$	\$	\$	\$

- 1. SURVEYS NEW- None
- 2. SURVEYS CONTINUING
  - a. Navigation Studies: The amount of \$650,000 is requested in fiscal year 2006 for one navigation study.

#### **MASSACHUSETTS**

Boston Harbor, MA 2,524,000 1,111,000 516,000 650,000 247,000 New England District

Boston Harbor is located along the eastern shoreline of Massachusetts and is New England's largest port serving as the principal distribution point for the commerce of Massachusetts, New Hampshire and Vermont. In 2002, waterborne commerce totaled 20.4 million tons, of which approximately 73 percent were liquid petroleum products. The inner harbor is comprised of the Main Ship, Reserved, Chelsea River and Mystic River Channels. The Massachusetts Port Authority (Massport) has been upgrading facilities at Conley Terminal, which is located along the southerly side of the Reserved Channel. In addition, Massport has plans to expand Conley Terminal onto the adjacent Coastal Oil Terminal property and to develop a bulk cargo terminal at nearby North Jetty Terminal, increasing the number of berths that would benefit from deeper channels. The Port of Boston Competitiveness Task Force Report, dated December 1998, concluded that the channels accessing Conley Terminal must be dredged to at least 45 feet for New England companies to remain competitive by receiving containerized cargo by direct ocean going service. Ships drawing 45-foot drafts now make 3 calls a week to Boston Harbor. Navigation improvements to deepen portions of Boston Harbor to at least 45 feet would increase the efficiency of harbor operations and reduce tidal delays for larger vessels. A feasibility cost-sharing agreement (FCSA) was executed with Massport on 27 June 2002. Massport has requested an amendment to the FCSA to investigate deepening the Chelsea River Channel to 40 feet. The reconnaissance report, certified in August 2001, recommended studies to deepen the Main Ship, Reserved, and Entrance Channels to 45 feet.

Fiscal Year 2005 funds are being used to continue the feasibility phase, including channel design efforts, ship simulation studies, environmental resource surveys and multi-port, multi-modal economic analysis. Funds requested for Fiscal Year 2006 will be used to continue the feasibility phase, including disposal site

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
•	\$	\$	\$	\$	\$

Boston Harbor, MA New England District

investigations, completion of channel design and preparation of a draft feasibility report and SEIS. The estimated cost of the feasibility phase is \$4,880,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$4,964,000
Reconnaissance Phase (Federal)	84,000
Feasibility Phase (Federal)	2,440,000
Feasibility Phase (Non-Federal)	2,440,000

The reconnaissance phase was completed in June 2002. The feasibility study completion date is being determined.

 Subtotal Navigation Studies - Continuing
 2,524,000
 1,111,000
 516,000
 650,000
 247,000

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
-	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

b. Flood Damage Prevention Studies: The amount of \$580,000 is requested in fiscal year 2006 for three flood damage prevention studies.

#### MARYLAND

Anacostia River and Tributaries. Prince George's County Levee, MD & DC 1.453.000

1.047.000

79.000

180.000

147.000

**Baltimore District** 

The Anacostia River has a total drainage area of 170 square miles, of which 136 square miles are in Maryland, and 34 square miles are in the District of Columbia. The Northeast and Northwest Branches originate in Maryland and flow through several highly urbanized areas before forming the Anacostia River about nine miles upstream from its junction with the Potomac River. The Corps of Engineers' involvement in the basin dates back more than 115 years and includes projects and programs for navigation, flood control, debris removal, and aquatic vegetation control. Two major projects were undertaken. From 1902 through 1940, the District of Columbia portion of the river was channelized, seawalls were built, Kingman Lake and East Lake were constructed, and more than 1,000 acres of mudflats and wetlands were filled with dredged material. The primary purpose of this work was to provide a park for the eastern portion of the city. From 1952 to 1959, a flood control project was constructed in Prince George's County, Maryland, along the Northeast and Northwest Branches, and the Anacostia River. A total of 28,000 feet of levees and 14,000 feet of channels were constructed to solve critical flood problems. This effort was successful; however, the construction resulted in a further loss of wetlands and fish and wildlife habitat. A reconnaissance study for the Anacostia River and Tributaries, completed in December 1991, identified extensive potential Federal involvement in the Anacostia watershed restoration effort. This reconnaissance study recommended that additional feasibility studies be conducted at numerous sites in the Anacostia area. Prince George's County Levee is the third feasibility study from the reconnaissance effort, and will investigate improving the existing local flood protection levee in Prince George's County and restoring the environment through wetland creation and restoration. According to a recent County study, the levees do not currently provide 100-year level of protection under existing conditions nor do they have the required 3-foot freeboard above the 100-year flood elevation. The non-Federal sponsors for this third study are Prince George's County and the Maryland-National Capital Park and Planning Commission. The feasibility cost-sharing agreement was executed in January 1999.

Fiscal Year 2005 funds are being used to continue the feasibility phase, including plan formulation, economic and environmental analyses, and public coordination. The funds requested for fiscal year 2006 will be used to continue the feasibility phase, including final plan formulation, preparation of the draft feasibility report, and

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
•	\$	\$	\$	\$	\$

Anacostia River and Tributaries, Prince George's County Levee, MD & DC Baltimore District

public coordination. The estimated cost of the feasibility phase is \$2,706,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$2,806,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,353,000
Feasibility Phase (Non-Federal)	1,353,000

The reconnaissance phase for the Prince George's County Levee area was completed in January 1999. The Prince George's County Levee feasibility study schedule completion is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
NEW YORK					
Bronx River Basin New York District	2,350,000	251,000	119,000	250,000	1,730,000

The study area for the Bronx River Basin is located in central Bronx County and lower Westchester County, New York. The Bronx River drains an approximate 56.4 square mile area. The river and its tributaries carry large amounts of sediment that are deposited in the lower reaches at river bends and bridges which leads to flooding during storms that produce high flow events. Major damage centers include the Towns of North Castle, Scarsdale, Mount Pleasant, and Greenburgh; and the Cities of Yonkers, White Plains, and Mount Vernon. In addition to flooding problems, environmental degradation of the Bronx River affects the water quality and fish and wildlife habitats of the watershed.

The reconnaissance study, certified in January 2001, found there is a Federal interest to proceed to the feasibility phase and recommended further studies for potential flood damage prevention measures, ecosystem restoration opportunities for 18 sites along the Bronx River. The reconnaissance study also recommended that a comprehensive basin-wide watershed analysis be undertaken to identify non-structural measures for ecosystem restoration. The local sponsors are the New York City Department of Environmental Protection and the Westchester County Department of Parks, Recreation, and Conservation. The feasibility cost-sharing agreement was executed in November 2003.

The Fiscal Year 2005 funds are being used to continue the feasibility study, including data collection and coordination with local interests. The funds requested for fiscal year 2006 will be used to continue the feasibility phase of the study, including engineering modeling, environmental sampling, coordination with non-Federal and formulation of alternatives. The estimated cost of the feasibility phase is \$4,500,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$4,600,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	2,250,000
Feasibility Phase (Non-Federal)	2,250,000

The reconnaissance phase was completed in November 2003. The feasibility study schedule is being determined.

APPROPRIATION TITLE:	General Investigations,	Fiscal Year 2006
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Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
VIRGINIA					
Dismal Swamp and Dismal Swamp Canal Norfolk District	602,000	134,000	79,000	150,000	239,000

The Dismal Swamp and Dismal Swamp Canal are located in Chesapeake, Virginia. The swamp is maintained by fixed weirs across drainage ditches to restrict the flow of water out of the swamp and inward to Lake Drummond, which is in the middle of the swamp. Lake Drummond also feeds water through a feeder ditch to maintain the water level in the Dismal Swamp Canal. The canal is maintained as part of the Atlantic Intracoastal Waterway. During heavy storm events Lake Drummond inundated areas in the City of Chesapeake, Virginia and the surrounding area. The remnants of Hurricanes Dennis and Floyd in September 1999 caused significant damages form flooding in the city and the surrounding area.

The Section 905 (b) analysis was certified on November 14, 2003, which found there was a Federal interest to pursue feasibility level studies for preventing or minimized the flooding by diverting the floodwaters from Lake Drummond through the navigation locks at Deep Creek, Virginia and at South Mills, North Carolina. The locks are located at each end of the Dismal Swamp Canal. In addition, the reconnaissance phase will determine if flood damage reduction measures in the City of Chesapeake are warranted, as well as opportunities for ecosystem restoration. The City of Chesapeake, Virginia, is the feasibility study sponsor, who executed the feasibility cost-sharing agreement in September 2004.

Fiscal Year 2005 funds will be used to continue the feasibility study, including data collection and coordination with local interests. The funds requested for Fiscal Year 2006 will be used to continue the feasibility phase of the study, including data collection, formulation of plan alternatives, and coordination with local interests. The estimated cost of the feasibility phase is \$502,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$602,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	251,000
Feasibility Phase (non-Federal)	251,000

The reconnaissance phase was completed in September 2004. The feasibility study schedule is being determined.

Subtotal Flood Damage Prevention Studies - Continuing 4,405,000 1,432,000 277,000 580,000 2,116,000

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
-	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

c. Shoreline Protection Studies: The amount of \$530,000 is requested in fiscal year 2006 for three shoreline protection studies.

#### **NEW JERSEY**

New Jersey Shore Protection, Hereford to Cape May Inlet 1,265,000 185,000 365,000 400,000 315,000 Philadelphia District

The study area is located in Cape May County along New Jersey's last coastal barrier island between Hereford Inlet and Cape May Inlet. This area includes the Towns of North Wildwood, Wildwood and Wildwood Crest. Coastal storms and tidal surges cause major damages to businesses, residences, and small marinas in these towns due to the low-lying topography of the beaches and lack of a dune system. In addition, accretion of shoreline along the southern end of the barrier island near Cape May Inlet is increasing the dredging requirements for the Federal navigation channel, where there is a U.S. Coast Guard Receiving Center. The accretion is also increasing the dredging requirements for the Town of Wildwood, New Jersey, to keep its outfall pipe system clear of sediment. The September 1990 study for the New Jersey Shore recommended there is a Federal interest to proceed to further feasibility level studies for potential shoreline protection projects along the Atlantic coast of New Jersey, which included the Hereford Inlet to Cape May Inlet area.

The feasibility phase is evaluating plan alternatives for hurricane and store damage reduction measures, including sand bypassing measures. In addition, the feasibility study is evaluating opportunities for ecosystem restoration in the back-bay areas to improve fish and wildlife habitats and restoring wetlands. The feasibility Cost-Sharing agreement was executed in September 2002 with the New Jersey Department of Environmental Protection.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study, including problem identification, data collection, formulation of alternative plans, and coordination with local interests. The funds requested for Fiscal Year 2006 will be used to continue the feasibility study, including economic and environmental analyses, plan formulation, and coordination with local interests. The estimated cost of the feasibility phase is \$2,500,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,515,000
Reconnaissance Phase (Federal)	15,000
Feasibility Phase (Federal)	\$1,250,000
Feasibility Phase (Non-Federal)	\$1,250,000

The reconnaissance phase was completed in September 2002. The feasibility study schedule completion is to be determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Raritan Bay and Sandy Hook Bay, Leonardo New York District	1,375,000	1,086,000	189,000	100,000	0

The study area is located in Leonardo, Monmouth County, New Jersey, approximately 20 miles southwest of the Battery New York City. The coastal area in Leonardo, New Jersey, area is subject to shoreline erosion from storm surges during coastal storms events. These events have caused recession of the beachfront resulting in little or no protection to the existing coastal protection measures and drainage works, which are now subject to further damage during future storm events. The purpose of the feasibility study is to assess the need for hurricane and storm damage protection measures along the shoreline.

The reconnaissance study for the overall Raritan Bay and Sandy Hook Bay Study, completed in February 1994, recommended separate interim feasibility study be conducted for the Leonardo area. Potential hurricane and storm damage protection measures being investigated include levees, tide gates, dunes, and beach fill. A supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999 with the New Jersey Department of Environmental Protection.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study, including economic optimization, environmental impact assessments, and local coordination. Fiscal Year 2006 funds will be used to complete the feasibility study, including plan selection and preparation of feasibility report. The estimated cost of the feasibility phase is \$2,750,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,750,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	1,375,000
Feasibility Phase (Non-Federal)	1,375,000

The overall reconnaissance phase was completed in February 1994. The supplemental feasibility cost-sharing agreement for Leonardo was executed in April 1999. The feasibility study is scheduled for completion in September 2006.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

North Atlantic Division

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
NEW YORK					
North Shore of Long Island, Asharoken New York District	998,000	788,000	180,000	30,000	0

The study area, located in the Village of Asharoken some 40 miles east of New York City, is subject to tidal flooding from coastal storms. The Village, a portion of the Town of Huntington in Suffolk County, New York, is located on a narrow spit of land about 2.5 miles long with Long Island Sound to the north and Duck Island Harbor to the south. The feasibility study will assess potential hurricane and storm damage measures.

Residential and commercial properties experienced major damages from storms in 1962, 1992 and 1996. During the 1992 storm, over 3000 area residents were without access and emergency services due to the flooding of Asharoken Avenue, the only access route between the Village and the Long Island mainland. The reconnaissance report for the North Shore of Long Island, completed in September 1995, found that there is Federal interest to proceed to the feasibility phase and recommended further studies for a potential plan for beach fill and buried seawalls to protect the area and keep the access roadway free from flooding. The feasibility cost sharing agreement was executed March 21, 2001 with the New York State Department of Environmental Conservation.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study, including draft economic evaluation and plan selection. The funds requested for fiscal year 2006 will be used to complete the feasibility study, including final economic evaluation, plan selection, environmental assessment, and the preparation of the feasibility report. The estimated cost of the feasibility phase is \$1,996,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,996,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	998,000
Feasibility Phase (Non-Federal)	998,000

The reconnaissance phase was completed in March 2001. The feasibility study is scheduled for completion in September 2006.

Subtotal Shoreline Protection Studies - Continuing 3,638,000 2,059,000 734,000 530,000 315,000

d. Special Studies: None

	Total	Total Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
•	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

e. Ecosystem Restoration Studies: The amount of \$4,185,000 is requested in fiscal year 2006 for 12 ecosystem restoration studies.

#### MARYLAND

Chesapeake Bay Shoreline Erosion, MD 3,196,000 50,000 183,000 525,000 2,438,000
Maryland Coastal Management
Baltimore District

The study area encompasses the Chesapeake Bay and tributaries in the state of Maryland, and the Commonwealths of Virginia and Pennsylvania, draining some 20,000 square miles along the east coast of the United States. The area is rural in the northern and southern portions of the watershed, and urban to suburban in the center portions of the watershed. The reconnaissance report, approved in December 2002, found there was a Federal interest for three feasibility studies to evaluate sediment issues in the Susquehanna River Basin and Chesapeake Bay, and three feasibility studies to evaluate shoreline erosion protection measures at several localities around the Chesapeake Bay.

This second feasibility study will focus on ways to protect the living resources and infrastructure of the Chesapeake Bay. The feasibility study will develop a Maryland shoreline master plan that will identify problems and opportunities along Maryland's Chesapeake Bay shoreline coast where shoreline protection measures would restore loss of coastal habitat. The non-Federal sponsor for this second feasibility study is the Maryland Department of Natural Resources. The feasibility study cost sharing agreement was executed in September 2004.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study, including data gathering, economic and environmental analyses, and public coordination. The funds requested for fiscal year 2006 will be used to continue the feasibility study, including economic and environmental analyses, public coordination, and preparation of the shoreline master plan. The estimated cost of the feasibility phase is \$6,294,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary for both studies cost sharing is as follows:

Total Estimated Study Cost	\$6,343,000
Reconnaissance Phase (Federal)	49,000
Feasibility Phase (Federal)	3,147,000
Feasibility Phase (Non-Federal)	3,147,000

The reconnaissance phase was completed in September 2004. The feasibility study schedule completion is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Eastern Shore, Mid-Chesapeake Bay Island Baltimore District	2,833,000	1,609,000	724,000	500,000	0

The Eastern Shore study area includes seven major watersheds; Sassafras River, Chester River, Eastern Bay, Choptank River, Nanticoke River, Wicomico River, and Pocomoke River that empty into the Chesapeake Bay.

The reconnaissance report, certified in November 1999, found there is a Federal interest to proceed to feasibility phase studies in eight areas and recommended that potential plans be evaluated for: (1) wetland corridor creation, (2) wetland restoration in marginal agricultural areas, (3) wetland floodplain function restoration on naturally occurring watercourses, (4) anadromous fish passage, (5) treatment of contaminated and nutrient-laden groundwater, (6) beneficial use of dredged material, (7) land acquisition, and (8) master plan for restoration, creation, and protection of the natural infrastructure.

Mid-Chesapeake Bay Island is the first feasibility study resulting from the reconnaissance report. This feasibility study is evaluating restoring hundreds of acres of wetlands and fish and wildlife island habitat in the Mid-Chesapeake Bay area through the beneficial use of dredged material. The feasibility cost-sharing agreement for the Mid-Chesapeake Bay Island area study was executed in November 2002 with the Maryland Department of Transportation (Maryland Port Administration). Additional feasibility cost-sharing agreements will be executed when the State of Maryland sets it study prioritization and funding becomes available.

FY 2005 funds are being used to continue the feasibility phase of the study, including formulation of alternatives plans, environmental impact analyses, public coordination and preparation of the draft feasibility report. The funds requested for FY 2006 will be used for public coordination, addressing agency and public comments, and preparation of the final feasibility report. The estimated cost of the feasibility phase is \$5,236,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,451,000
Reconnaissance Phase (Federal)	215,000
Feasibility Phase (Federal)	2,618,000
Feasibility Phase (non-Federal)	2,618,000

The reconnaissance phase for the Mid-Chesapeake Bay Island study was completed in November 2002. The Mid-Chesapeake Bay Island feasibility study is scheduled for completion in September 2006.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
MASSACHUSETTS					
Blackstone River Watershed Restoration, MA and RI New England District	1,447,000	1,044,000	79,000	170,000	154,000

The study area includes the entire Blackstone River Watershed, which originates in Worcester, Massachusetts and flows southward to the National Estuary of Narragansett Bay in Pawtucket, Rhode Island. The watershed is approximately 540 square miles and encompasses 30 cities and towns in south central Massachusetts and northern Rhode Island. There is one Federal flood control reservoir and four local protection projects within this relatively small watershed to alleviate flooding in urban areas and protect major utilities and roadways. These projects consist of over 9 miles of channel improvements, dikes, floodwalls, tunnels and conduits which have decreased the value and diversity of fish habitat in the project areas and have altered the natural hydrologic regime of the watershed. The Blackstone River is also the largest single source of pollutants such as suspended solids, PCB's, metals and organics discharging into Narragansett Bay. One source of this pollution is the resuspension of contaminated sediments, which have collected behind existing impoundments along the river. The study will evaluate possible measures to correct the numerous problems of the Blackstone River Watershed and improve its overall resource value. A feasibility cost-sharing agreement was executed with the Massachusetts Executive Office of Environmental Affairs on 24 May 1999. By letter dated 31 May 2001, the Rhode Island Department of Environmental Management declined to participate in the feasibility study due to funding constraints.

Fiscal Year 2005 funds will be used to continue the feasibility phase, including cost estimates and plan evaluation. Funds requested for Fiscal Year 2006 will be used to continue the feasibility phase, including draft report preparation. The estimated cost of the feasibility phase is \$2,040,000, which is to be shared on a 50-50 percent basis by the Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$2,467,000
Reconnaissance Phase (Federal)	427,000
Feasibility Phase (Federal)	1,020,000
Feasibility Phase (Non-Federal)	1,020,000

The reconnaissance phase was completed in May 1999. The feasibility study completion date is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
NEW JERSEY					
Hudson-Raritan Estuary, Hackensack Meadowlands New York District	2,600,000	623,000	278,000	300,000	1,399,000

The study area encompasses approximately 8,450 acres of tidal wetlands in the Hackensack River Basin located in Bergen Essex and Hudson Counties, New Jersey. The Hackensack Meadowlands the largest remaining brackish tidal wetland complex in the Greater New York area. The area, about five miles west of Manhattan Island, is urban to suburban and has been heavily industrialized since the mid-nineteenth century. Since the 1890's, deforesting of the cedar stands, channel modifications, levee construction, and damming of the Hackensack River and its tributaries for irrigation and water supply purposes, has changed the estuary. Furthermore, the industrial activities, effluents discharges from local sources and highway stormwater systems, and leachates from former garbage dumps within the estuary, have contaminated portions of the meadowlands and further degraded the wetlands producing an unfavorable environment for fish and wildlife, including wading birds, shorebirds, raptors, anadromous fish, estuarine fish, and terrapins.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies for the Hackensack Meadowlands. The interim feasibility study for the Hackensack Meadowlands is assessing items that have a Federal interest for ecosystem restoration, including contaminant reduction measures, enhancement of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality with in the Hackensack Meadowlands. The non-Federal sponsor is the New Jersey Meadowlands Commission, who executed a feasibility cost-sharing agreement in April 2003.

Fiscal Year 2005 funds will be used to continue the feasibility phase of the study, including coordination with the USFWS, environmental data analysis for sites under consideration for restoration, and coordination with local interests. Funds requested for fiscal year 2006 will be used to continue the feasibility study, including geotechnical and biological baseline data collection, design development, and plan formulation for the Tier 1 sites and conceptual plans for the remaining sites. The estimated cost of the feasibility phase is \$5,200,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,200,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,600,000
Feasibility phase (Non-Federal)	2,600,000

The reconnaissance phase was completed in April 2003. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Hudson-Raritan Estuary, Lower Passaic River New York District	4,500,000	557,000	198,000	400,000	3,345,000

The study area is located in Essex County, New Jersey, about five miles west of the Battery of New York City and encompasses the Lower Passaic River Basin from the river's confluence with Newark Bay to Dundee Dam. The area is urban to suburban and has been heavily industrialized since the mid-nineteenth century. This industrial activity has resulted in the degradation of the wetlands; discharges of effluents into the river, and dumping of refuse resulting in contaminated sediments in the river that is unfavorable for fish and wildlife habitat.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies in the Lower Passaic River Basin. The feasibility study for the Lower Passaic River will assess items that have a Federal interest for ecosystem restoration, including contaminate reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality in the Lower Passaic River and sections of Newark bay. The non-Federal sponsor is the New Jersey Department of Transportation, Office of Maritime Resources, who executed a feasibility cost sharing agreement in June 2003.

Fiscal Year 2005 funds are being used to continue the feasibility study, including data collection and local coordination. Funds requested for Fiscal Year 2006 will be used to continue the feasibility study, including economic, hydraulic and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. The estimated cost of the feasibility phase is \$9,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$ 9,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	4,500,000
Feasibility phase (Non-Federal)	4,500,000

The reconnaissance phase was completed in June 2003. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
NEW YORK					
Hudson-Raritan Estuary, NY and NJ New York District	9,740,000	3,931,000	377,000	800,000	4,632,000

The study area includes the Port of New York and -New Jersey and includes the Ambrose and Anchorage Channel; New York and New Jersey Channels; Newark Bay Channel; Port Jersey Channel; Claremont Channel; Bay Ridge and Red Hook Channel; and Buttermilk Channel, the Upper and Lower New York Bays, the Raritan Bay and Jamaica Bay. The Port of New York-New Jersey is the largest port on the East coast with channels ranging depths of 35 to 45 feet. These waters and the surrounding shoreline, mudflats, intertidal marshes, and adjacent upland areas provide valuable habitat for fish, plant and wildlife resources, and accommodate migrating birds along the Atlantic flyway. The area is also utilized by a number of federally threatened/endangered species including the shortnosed sturgeon, five species of sea turtles, peregrine falcons, piping plovers and rosette terns.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies. The feasibility study is assessing thirteen specifics sites within the estuary for potential ecosystem restoration measures, including contaminant reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. The feasibility cost-sharing agreement was executed in July 2001 with the Port Authority of New York and New Jersey.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study, including data collection, preliminary plan formulation for a comprehensive estuary restoration improvement plan and coordination with local interests. The funds requested for fiscal year 2006 will be used to continue the feasibility phase, including data collection, economic, hydraulic, and environmental analyses necessary to formulate alternatives for a comprehensive restoration improvement plan and site-specific restoration opportunities. The estimated cost of the feasibility phase is \$19,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	19,240,000
Reconnaissance Phase (Federal)	240,000
Feasibility Phase (Federal)	9,500,000
Feasibility Phase (Non-Federal)	9,500,000

The reconnaissance phase was completed in July 2001. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Hudson-Raritan Estuary, Gowanus Canal New York District	2,500,000	770,000	238,000	400,000	1,092,000

The Gowanus Canal and Bay is located in Brooklyn, New York, approximately four miles southeast of the Battery, New York City. The non-Federal canal extends from the Hamilton Avenue Bridge at the end of a Federal navigation project located in Gowanus Bay, northeasterly into Brooklyn for approximately two miles. The Canal was constructed about 1881 to accommodate industrial users and commercial shippers from the Brooklyn waterfront. The area around the canal has been heavily industrialized and urbanized since the mid-nineteenth century.

The Gowanus Creek Channel is a Federal navigation project constructed between 1881 and 1952 it is a 30-foot deep channel, with a tapering width of 500-to-200 feet from Gowanus Bay to the vicinity of Sigourney Street, then an 18-foot deep channel, with a tapering width from 200-to-100 feet to the Hamilton Avenue Bridge for an approximate length of 4000 feet. In addition, there is a 30-foot deep, 150-foot wide branch channel from Gowanus Bay extending northerly to the Henry Street basin. The industrial users of the Canal throughout the nineteenth and twentieth centuries have caused significant environmental degradation to Gowanus Creek and Gowanus Canal by allowing hazardous materials to be deposited at the bottom of these channels. In addition, the pollution poses a great risk to area residents, and fish and wildlife.

The reconnaissance report for the Hudson-Raritan Estuary, approved in July 2000, found there is a Federal interest for further studies for the Gowanus Canal. The feasibility study for Gowanus Canal will assess opportunities that have a Federal interest for ecosystem restoration, including contaminant reduction measures, creation of wetlands, water quality improvements, and alteration of hydrology/hydraulics to improve water movement and quality. The feasibility cost-sharing agreement was executed in January 2002 with the New York City Department of Department of Environmental Protection.

Fiscal year 2005 will be used to continue the feasibility phase of the study, including data collection, economic, hydraulic, and environmental analyses necessary to establish baseline conditions, and formulate plan alternatives. Funds requested for fiscal year 2006 will be used to continue the feasibility study, including plan formulation and selection, and preparation of the environmental documentation. The estimated cost of the feasibility phase is \$5,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$5,000,000
Reconnaissance phase (Federal)	0
Feasibility phase (Federal)	2,500,000
Feasibility phase (Non-Federal)	2,500,000

The reconnaissance phase was completed in January 2002. The feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
PENNSYLVANIA					
Schuylkill River Basin, Wissahickon Creek Basin Philadelphia District	879,000	161,000	79,000	200,000	439,000

This study area is located in southeastern Pennsylvania, along the Wissahickon Creek, a tributary to the Schuylkill River. The 25-mile long creek is about 13 miles upstream of the confluence with the Delaware River in Philadelphia, Pennsylvania, draining an approximate area of 64 square miles. High water flows during storm events have degraded the ecosystem and water quality within the creek due to sedimentation from streambank erosion, as well as causing flood damages in the communities of Whitpain, Lower Gwynedd, Whitemarsh, Springfield, Ambler, West Ambler, Lansdale, Ft. Washington and Abington, Pennsylvania. Major floods occurred in 1973, 1975, 1976, 1978, 1979, and 1982. The most recent storm event, in September 1996, caused damages estimated at \$3.5 million and damaged 500 residences. A Limited Reconnaissance Study of the Schuylkill River basin, completed in 1990, recommended further studies for flood damage reduction and protection measures within the Schuylkill River basin, including Wissahickon Creek.

The Section 905 (b) analysis was certified on August 16, 2002. This feasibility study will evaluate potential solutions for ecosystem restoration, flood plain management measures, streambank erosion control, water quality management, stream flow and corridor management, and geographic information system modeling, as well as opportunities for local flood damage reduction measures in the City of Philadelphia, Pennsylvania. The feasibility cost-sharing agreement was executed in April 2004 with the City of Philadelphia. Additional feasibility studies within the Wissahickon Creek watershed will be negotiated with Montgomery County and the Pennsylvania Department of Environmental Protection upon prioritization of the studies by them and the availability of local funding.

Fiscal Year 2005 funds are being used to continue the feasibility study, including data collection and coordination with local interest. The funds requested for Fiscal Year 2006 will be used to continue the feasibility phase, including data collection, environmental, economic and engineering analyses, formulation of plan alternatives, and coordination with local interests. The estimated cost of the feasibility phase is \$1,508,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,633,000
Reconnaissance Phase (Federal)	125,000
Feasibility Phase (Federal)	754,000
Feasibility Phase (Non-Federal)	754,000

The reconnaissance phase was completed in April 2004. The feasibility study schedule completion is to be determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Schuylkill River Estuarine Philadelphia District	925,000	195,000	55,000	250,000	425,000

The study area is located within the 1,916-square-mile Schuylkill River Basin in Southeastern Pennsylvania. Several Federal projects within the river basin have degraded the ecosystem. Some of these projects include the multipurpose Blue Marsh Lake project, the 6-mile long Federal navigation project from the mouth of the Schuylkill River to University Avenue, Philadelphia, and the 10-mile long culm removal navigation project between the Fairmount and Norristown Dams. The latter two projects have degraded or eliminated fish and wildlife habitat and wetland areas in the lower basin, through bulkheading of the river's streambanks, disposal of dredged material along the streambanks, and disposal of culm removal. The lower estuary portion of the Schuylkill River in the City of Philadelphia has been heavily industrialized since the early 19<sup>th</sup> century. The industrial effluences continue to degrade the estuary's water quality today. In addition, the upper Schuylkill River Basin has seen degradation of the ecosystem due to mining activities and acid mine run-off. The ecosystem degradation also inhibits anadromous fish runs throughout the basin. Federal and State of Pennsylvania Fish and Wildlife officials have also listed several species as being endangered, including the Peregrine falcons, golden eagles, short nose sturgeon, bog turtle, red belly turtle and eastern mud turtle.

The Section 905 (b) analysis was certified on November 14, 2003, which found there was a Federal interest to conduct additional feasibility level studies. The feasibility phase of the study will evaluate potential solutions for estuarine ecosystem measures in the Schuylkill River Basin, flood plain management, streambank erosion control, water quality management, stream flow and corridor management measures, and geographic information system modeling. The City of Philadelphia and the Pennsylvania Department of Environmental Protection are potential study sponsors, who fully understand the cost-sharing requirements for the feasibility study. The feasibility cost-sharing agreement is scheduled for completion in September 2005.

Fiscal Year 2005 funds are being used to complete the reconnaissance phase at full Federal expense, including final coordination of the project management plan and execution of the feasibility cost-sharing agreement with the potential study sponsor. The funds requested for Fiscal Year 2006 will be used to initiate the feasibility study, including data collection and coordination with local interests. The preliminary estimated cost of the feasibility phase is \$1,350,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1	1,600,000
Reconnaissance Phase (Federal)	\$	250,000
Feasibility Phase (Federal)	\$	675,000
Feasibility Phase (Non-Federal)	\$	675,000

The reconnaissance phase is scheduled for completion in September 2005. The feasibility study schedule completion is to be determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
VIRGINIA					
Chesapeake Bay Shoreline Erosion, VA Mathews County Norfolk District	175,000	68,000	28,000	40,000	39,000

The study area encompasses the Chesapeake Bay and tributaries in the state of Maryland, and the Commonwealths of Virginia and Pennsylvania, draining some 20,000 square miles along the east coast of the United States. The area is rural in the northern and southern portions of the watershed, and urban to suburban in the center portions of the watershed. The reconnaissance report, approved in December 2002, found there was a Federal interest for three feasibility studies to evaluate sediment issues in the Susquehanna River Basin and Chesapeake Bay, and three feasibility studies to evaluate shoreline erosion protection measures at several localities around the Chesapeake Bay.

This third feasibility study, located in the New Point Comfort Lighthouse area in Mathews County, VA, at the confluence of Mobjack Bay and the Chesapeake Bay, will evaluate potential erosion reduction measures, habitat restoration measures, and opportunities for beneficial uses of dredge material. Potential solutions that are being evaluating during the feasibility phase consists of structural measures to enhance the growth of submerged aquatic vegetation to restore fish and wildlife habitats in the wetlands, and additional shoreline erosion reduction measures to protect the New Point Comfort Lighthouse, a historical structure. The non-Federal sponsor for the feasibility phase is Mathews County, VA. The feasibility cost sharing agreement was executed in May 2004.

Fiscal Year 2005 funds are being used to continue the feasibility study, including data gathering, economic and environmental analyses, and public coordination. The funds requested for fiscal year 2006 will be used to continue the feasibility study, including economic and environmental analyses, public coordination, and completion of the draft feasibility report. The estimated cost of the feasibility phase is \$350,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary for both studies cost sharing is as follows:

Total Estimated Study Cost	\$350,000
Reconnaissance Phase (Federal)	0
Feasibility Phase (Federal)	175,000
Feasibility Phase (Non-Federal)	175,000

The reconnaissance phase was completed in May 2004. The feasibility study schedule completion is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Elizabeth River Basin, Environmental Restoration, Hampton Roads, Phase II - Paradise Creek Norfolk District	650,000	130,000	184,000	200,000	136,000

The study area for this feasibility study effort will encompasses Paradise Creek in Portsmouth, Virginia. The bottom sediments and wetlands have been contaminated for over two hundred years by industry and commerce. This tributary to the Elizabeth River is one of the nation's most contaminated waterways. This sub-estuary of the Chesapeake Bay once supported spawning grounds for terns, peregrine falcons, and great egrets, as well as mud flats for shellfish.

The reconnaissance report for the Elizabeth River Basin, certified in November 1997, found there was a federal interest to pursue further feasibility studies for sediment restoration measures at five sites: Scuffletown Creek, Scott's Creek, the former Eppinger and Russell wood treatment facility site, the Compostella Bridge site, and Paradise Creek, as well as wetland ecosystem restoration measures at 19 sites.

The potential non-Federal sponsors had originally requested that the Scott's Creek Site be evaluated for sediment remediation measures as their first priority. However, after performing further evaluations at the five sediment restoration sites, they found there were worse sediment contamination conditions at the Eppinger and Russell wood treatment facility and Paradise Creek sites. During negotiations of the feasibility cost-sharing agreement for Scott's Creek site, the non-Federal sponsors changed their priorities and requested that these two sites be evaluated first instead of Scott's Creek. Since the Eppinger and Russell wood treatment facility site is currently under evaluation by another organization, the non-Federal sponsors unanimously requested that Paradise Creek site be evaluated for sediment restoration measures as their top priority. The potential sponsors for this feasibility study are the Commonwealth of Virginia and the Cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach, Virginia, who understand the cost-sharing requirements for the feasibility phase of the study. The supplemental feasibility cost-sharing agreement is scheduled for execution in November 2005.

The funds requested for Fiscal Year 2005 will be used to negotiate and execute a supplemental feasibility cost-sharing agreement for the Paradise Creek site and prepare a project management plan. The funds requested for fiscal year 2006 will be used to initiate the Paradise Creek site feasibility study, including economic and cultural analyses, data collection for plan formulation, and coordination with local interests. The preliminary estimated cost of feasibility phase is \$1,200,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$1,250,000
Supplemental FCSA (Federal)	50,000
Feasibility Phase (Federal)	600,000
Feasibility Phase (non-Federal)	600,000

The supplemental feasibility cost-sharing agreement for the Paradise Creek site study is scheduled for execution in November 2005. The Paradise Creek feasibility study schedule is being determined.

Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Lynnhaven River Basin Norfolk District	3,100,000	104,000	383,000	400,000	2,213,000

Lynnhaven River Basin is located in Virginia Beach, Virginia, on the south shore of the Chesapeake Bay. The river drains an approximate 50 square miles watershed in southeastern Virginia and flows northerly emptying into the Chesapeake Bay about 10 miles east of Norfolk, Virginia. A Federal navigation project is maintained within the upper reaches of the river. The project depth varies from 10 feet deep at the river's entrance with Chesapeake Bay, to a 6 feet deep channel at the narrows between Broad Bay and Linkhorn Bay. In addition, the river basin was once a highly productive ecosystem, producing the world famous Lynnhaven oyster. However, residential and commercial development, and the loss of wetlands and forested buffers have increased sedimentation, which degraded the ecosystem and water quality, causing the oyster population to decline to essentially no marketable production today. In addition, only 900 acres of wetlands exist today, which is less than half of the acreage present 30 years ago.

The Section 905 (b) analysis was certified in January 2004, which found there was a Federal interest for further feasibility phase studies for six areas of concern within the Lynnhaven River Basin. The feasibility study will evaluate ecosystem restoration measures to improve water quality, restore wetlands, sub-aqueous vegetation, and fish and wildlife habitats, and improve the river bottom material by dredging or other decontamination methods. The sponsor for the feasibility phase of the study is the City of Virginia Beach, Virginia, who understands the cost-sharing requirements to the feasibility phase of the study. The feasibility cost-sharing agreement was executed in September 2004.

Fiscal Year 2005 funds are being used to continue the feasibility phase of the study including data gathering and the development of a hydrodynamic and water quality model of the basin. The funds requested in fiscal year 2006 funds will be used to continue the feasibility phase of the study, including continued development of the river basin modeling efforts, economic and environmental analyses, preliminary plan formulation, and local coordination. The estimated cost of feasibility phase is \$3,080,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

Total Estimated Study Cost	\$3,180,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	1,540,000
Feasibility Phase (non-Federal)	1,540,000

The reconnaissance phase was completed in September 2004. The feasibility study schedule completion is being determined.

 Subtotal Ecosystem Restoration Studies - Continuing
 32,545,000
 9,242,000
 2,806,000
 4,185,000
 16,312,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006

North Atlantic Division

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
•	\$	\$	\$	\$	\$

#### 2. SURVEYS - CONTINUING

f. Watershed/Comprehensive Studies: The amount of \$200,000 is requested in fiscal year 2006 for one water/comprehensive study.

#### **NEW HAMPSHIRE**

Merrimack River Watershed Study, NH and MA 3,700,000 903,000 198,000 200,000 2,399,000 New England District

The Merrimack River originates in Franklin, New Hampshire at the confluence of the Pemigewasset and Winnipesaukee Rivers and flows southerly towards the Massachusetts border then easterly towards the coast. The Merrimack River basin encompasses an approximate 5,010 square miles area in Massachusetts and New Hampshire. Significant improvements have been made to improve the overall quality of the Merrimack River. Federal and state agencies, communities and the private sector have made substantial investments in wastewater treatment plants to address point source pollution. However, elimination of combined sewer outfalls (CSOs) is needed to fully restore the ecosystem to support habitat for anadromous fisheries, a source of drinking water, and provide a recreational resource for the region. The US Environmental Protection Agency is requiring the communities of Haverhill, Lawrence, and Lowell in Massachusetts and Manchester and Nashua in New Hampshire to address eliminating CSOs discharges into the Merrimack River. Current estimates for eliminating CSOs is over \$500 million and the five communities are concerned with the high cost. These communities have formed the Merrimack CSO Coalition and are requesting that studies be conducted to allow for science based decisions on CSO mitigation and storm water control, as well as opportunities to restore anadromous fisheries, improve fish and wildlife habitat, restore degraded wetlands, address low flow issues, and prioritize investments to improve the water quality of the river.

The Section 905(b) analysis was certified on 25 January 2002, which found there was a Federal interest to pursue further watershed/comprehensive studies in the Merrimack River Watershed. A cost-sharing agreement was executed with the City of Lowell, representing the Merrimack CSO Coalition, on 20 February 2002 for Phase I of the study. A second cost-sharing agreement is scheduled for execution in July 2005 to begin Phase II investigations. Phase II of the study will involve multiple agreements, which may be executed with different communities or State agencies.

Fiscal Year 2005 funds are being used to continue the overall study, including completion of the Phase I investigations in September 2005. These funds will also be used to execute a cost-sharing agreement to begin Phase II investigations, including data collection and evaluation, river studies and computer modeling. Funds requested for Fiscal Year 2006 will be used to continue the Phase II investigations of the study, including additional watershed modeling and analysis of plan

	Total	Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
-	\$	\$	\$	\$	\$

Merrimack River Watershed Study, NH and MA New England District

alternatives. The estimated cost of the feasibility study is \$7,200,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$7,300,000
Cost Sharing Agreement	100,000
Comprehensive Study (Federal)	3,600,000
Comprehensive Study (Non-Federal)	3,600,000

The study completion date is being determined.

Subtotal Watershed/Comprehensive Studies - Continuing	ng 3,700,000	903,000	198,000	200,000	2,399,000
TOTAL SURVEYS - CONTINUING	46,812,000	14,747,000	4,531,000	6,145,000	21,389,000
TOTAL SURVEYS - NEW AND CONTINUING	46,812,000	14,747,000	4,531,000	6,145,000	21,389,000

3. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - NEW: None.

	Total	Total Allocation		Tentative	Additional
	Estimated	Prior to	Allocation	Allocation	to Complete
Study	Federal Cost	FY 2005	FY 2005	FY 2006	After FY 2006
·	\$	\$	\$	\$	\$

## 4. PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) - CONTINUING

a. Ecosystem Restoration: None.

b. Navigation: None.

c. Watershed/Comprehensive: The amount of \$500,000 is requested in fiscal year 2006 for one Watershed/Comprehensive PED activity.

#### **VIRGINIA**

Elizabeth River Basin, Environmental Restoration, 750,000 165,000 30,000 500,000 55,000 Hampton Roads
Norfolk District

The project area includes Scuffletown Creek, a tributary to the Southern Branch of the Elizabeth River Basin, located within the cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach. Bottom sediments within the creek have been contaminated by three hundred years of industrial and commercial development making Scuffletown Creek one of the nation's most contaminated waterways with limited wetlands to support wildlife and filter pollution. The feasibility study, completed in July 2001, recommended an environmental restoration project to remove or clean-up 60,000 cubic yards of sediment in Scuffletown Creek. The feasibility study also recommended eight ecosystem restoration projects to restore 22 acres of marine tidal wetlands located throughout the Elizabeth River Basin to be accomplished under the Continuing Authorities Section 206 program. The estimated project cost for the Scuffletown Creek is \$14,400,000, with an estimated federal cost of \$9,360,000 and an estimated non-Federal cost of \$5,040,000. No benefit-cost ratio has been computed for this project because it is an ecosystem restoration project and benefits are not quantifiable in monetary terms. The Commonwealth of Virginia, and the Cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach, Virginia, fully understand the cost-sharing requirements for the design agreement. The design agreement was executed in November 2004. Preconstruction engineering and design will ultimately be cost-shared at the rate for the project to be constructed but will be financed through the preconstruction engineering and design effort at 25 percent non-Federal. Any adjustment that may be necessary to bring the non-Federal construction in line with the project cost sharing will be accomplished in the first year of construction. This project will be implemented under the authority of Section 312(b) of WRDA 1990, as amended.

Consistent with the cost sharing and financing concepts exacted by the Water Resources Development Act of 1986 and 1996, local interests are required to provide all lands, easements, rights-of-ways, relocations, and disposal areas, and pay 35 percent of all costs allocated to environmental protection and restoration.

Total Estimated Preconstruction		Total Estimated Preconstruction	
Engineering and Design Cost	\$1,000,000	Engineering and Design Cost	\$1,000,000
Initial Federal Share	750,000	Ultimate Federal Share	650,000
Initial Non-Federal Share	250,000	Ultimate Non-Federal Share	350,000

APPROPRIATION TITLE: General Investigations, Fiscal Year 2006  North Atlantic Division					
Study	Total Estimated Federal Cost \$	Allocation Prior to FY 2005 \$	Allocation FY 2005 \$	Tentative Allocation FY 2006 \$	Additional to Complete After FY 2006 \$
Elizabeth River Basin, Environmental Restoration, Hampton Roads					
Fiscal Year 2005 funds will be used to resume preconstru funds requested for Fiscal Year 2006 will be used to conti PED effort is being determined.					
Subtotal Watershed/Comprehensive - Continuing	750,000	165,000	30,000	500,000	55,000
d. Shoreline Protection: None e. Flood Control: None f. Multiple Purpose Power: None					
TOTAL PRECONSTRUCTION ENGINEERING AND DESIGN (PED) - CONTINUING	750,000	165,000	30,000	500,000	55,000

14,912,000

47,562,000

GRAND TOTAL SURVEYS AND PRECONSTRUCTION ENGINEERING AND DESIGN

7 February 2005 26

6,645,000

21,444,000

4,561,000

APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Washington, DC & Vicinity (New)

LOCATION: Washington, DC at the confluence of the Anacostia and Potomac Rivers.

DESCRIPTION: The existing flood protection project for downtown Washington, D.C., was authorized by the Flood Control Act of 1936 and consists of a levee between the Lincoln Memorial and Washington Monument, a raised section of P Street, SW, adjacent to Fort McNair, and three temporary closures. The authorized modifications will eliminate the temporary closures at 23rd Street and Constitution Avenue, NW, and 2nd and P Streets, SW. The temporary closure at 17th Street, NW, has been redesigned to improve its reliability and minimize the time required for construction. The authorized modifications will bring the top of the existing levee along the Reflecting Pool between 23rd and 17th Streets to a uniform elevation and increase the level of freeboard protection provided. Three drainage control structures have also been added to prevent backflow through the storm sewer system. All work is programmed.

AUTHORIZATION: Flood Control Act of 1946 and Water Resources Development Act of 1996. The project was reauthorized in the Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 8.3 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 4.1 to 1 at 7 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Post Authorization Change Report dated February 1998 at October 1997 price levels. Benefits will be updated once funds are appropriated before project is physically constructed.

SUMMARIZED FINANCIAL	. DATA	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost: Cash Contributions 0 Other Costs 0	\$7,000,000 0		Entire Project	0	To be determined
Total Estimated Project Cost	\$7,000,000				

Division: North Atlantic District: Baltimore Washington, DC & Vicinity

#### SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2004	3,096,000			PHYSICAL DATA
Conference Allowance for FY 2005	0			
Allocation for FY 2005	0		23rd Street, NW	-3 foot earth embankment, 1 drainage
Allocations through FY 2005	3,096,000	44		control structure
Allocation Requested for FY 2006	400,000	50	Reflecting Pool Levee	Fill at low spots
Programmed Balance to Complete			17th Street, NW	-3 foot concrete barrier, 8 foot temporary
after FY 2006	3,504,000			earth embankment, 1 drainage control
Unprogrammed Balance to Comple	te			structure
after FY 2006	0		2nd & P Streets, SW	-2 foot earth berm, 1 drainage control
				structure

JUSTIFICATION: The initiation of this flood damage reduction project is necessary to reduce the risk of flood damage to the museums on the National Mall, the Franklin Delano Roosevelt Memorial, and the World War II Memorial. Flooding on the Potomac River at Washington, DC is affected by both tidal flooding from the Chesapeake Bay and the flood flows on the Potomac River upstream from Washington, DC. Flooding in March 1936 led to estimated damages of \$7,993,000 (October 2002 prices) in Washington, DC and the loss of two lives. This damage estimate is based on development existing at the time of the flood. The project, authorized by the Flood Control Act of 1936, primarily consisted of: a wall and levee 2,300 feet long at Potomac Park between the Lincoln Memorial and the Washington Monument with a gap to accommodate an emergency closure structure, and raising a section of P Street, all to protect the downtown Washington area; and a wall and levee 12,900 feet long to protect the Anacostia Naval Air Station and Bolling Air Force Base. The project, which was placed in operation in 1940, was constructed to protect against a flood discharge of 700,000 cubic feet per second on the Potomac River. Subsequent to project completion, settlement of P Street occurred and construction in Potomac Park increased the gap in the protection. Due to the experience of the 1942 flood, the Flood Control Act of 1946 authorized improvements to restore the design level of protection and improve the operation of the project. The total effectiveness of the project depends on implementation of the improvements authorized in 1946. At present, project operation continues to require implementation of emergency measures such that the ability of the project to provide the design level of protection is questionable. The estimated average annual benefits, all flood control, are \$2,100,000 based on the Post Authorization Change Report dated February 1998 at October 1997 price levels.

### FISCAL YEAR 2006: The requested amount will be applied as follows:

\$ 95,000
48,000
60,000
172,000
25,000
\$400,000

NON-FEDERAL COSTS: None.

Division: North Atlantic District: Baltimore Washington, DC & Vicinity

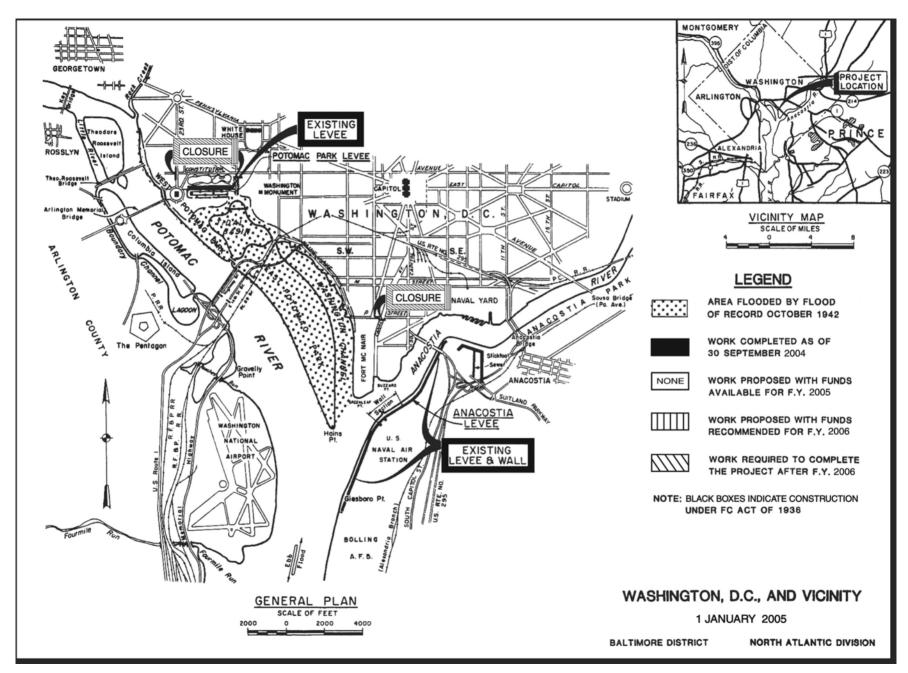
STATUS OF LOCAL COOPERATION: The local assurers for the project modification are the National Park Service, Ft. McNair, and the District of Columbia. These agencies will be responsible for providing lands, easements, and rights-of-way and operating and maintaining the project including making emergency closures during flood events. Letters of intent to provide local cooperation have been secured from each agency. A Memorandum of Understanding with the Park Service and Ft. McNair and a Memorandum of Agreement with the District of Columbia are scheduled for execution by January 2006.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$7,000,000 is the same as the latest estimate (\$7,000,000) presented to Congress (FY 2005).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment including Finding of No Significant Impact is included in the final General Design Memorandum dated May 1992. The Supplement to the GDM dated June 1996 also included an environmental assessment and Finding of No Significant Impact addressing changes since the GDM.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986.

Division: North Atlantic District: Baltimore Washington, DC & Vicinity



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: New York & New Jersey Harbor, New York and New Jersey (Continuing)

LOCATION: The Port of New York and New Jersey is located within the NY/NJ Harbor Estuary shared between the states of New York and New Jersey and consists of various navigation channels. These channels include: Ambrose Channel; Anchorage Channel; Kill Van Kull and Newark Bay Channel; Arthur Kill Channel; Port Jersey Channel; and, Bay Ridge and Red Hook Channel.

DESCRIPTION: This project consolidates four authorized projects.

- 1.) The Kill Van Kull and Newark Bay Channels, NY and NJ project consists of deepening existing 40-foot project to 45 feet MLW. Unprogrammed work includes dredging of Pierhead Channel and Port Newark in the vicinity of Port Newark and Port Elizabeth.
- 2.) The New York Harbor and Adjacent Channels, Port Jersey Channel, NJ project consists of deepening the non-Federal access channel to 41 feet MLW from the Federal Anchorage Channel to its head of navigation.
- 3.) The Arthur Kill, Howland Hook Marine Terminal, NY and NJ project consists of deepening the existing Federal 35-foot Arthur Kill Channel to 41 feet MLW from its confluence with the Kill Van Kull Channel to Howland Hook Marine Terminal in Staten Island, New York, and to 40 feet MLW from the Howland Hook Marine Terminal to the Tosco Oil Terminal oil facilities, New Jersey and New York, respectively. Also included within the Arthur Kill Channel are selected widenings and realignments. The Arthur Kill Project also provides for mitigation consisting of restoration and enhancement of approximately 23 acres of intertidal salt marsh).

  4.) The New York and New Jersey Harbor, NY and NJ, project consists of deepening the Ambrose Channel to 53 feet MLW; the Anchorage Channel, Kill Van Kull, Newark Bay, Port Jersey Channel, Bay Ridge Channel, and the Arthur Kill Channel to Howland Hook to 50 feet MLW and 52 feet MLW if in rock or otherwise hard material. Mitigation for project impacts, turning basins and selective bulkheading are included. All work is programmed.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Acts of 1986, 1996, 1999, and 2000.

REMAINING BENEFIT - REMAINING COST RATIO: 7.1 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 2.7 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 2.7 to 1 at 7 percent

BASIS OF BENEFIT - COST RATIO: The benefit-to-cost ratio shown above applies to the consolidation of the four authorized projects. The analysis reflects annualized costs and benefits, adjusted to October 2001 price levels.

Division: North Atlantic District: New York New York & New Jersey Harbor, NY and NJ

		ACCUM. PHYSICAL
		PCT OF EST STATUS PERCENT COMPLETION
SUMMARIZED FINANCIAL DATA		FED. COST (1 Jan 2005) COMPLETE SCHEDULE
		Programmed work:
Estimated Appropriation Requirement (CoE)	\$1,399,800,000	
Programmed Construction \$1,325,300,000		Phase I 40 ft. 100 Sep 1995
Unprogrammed Construction 74,500,000		Phase II 45 ft. 100 Dec 2004
		Port Jersey Channel 40 To be determined
Estimated Appropriation Requirement (USCG)	4,050,000	
Estimated Total Appropriation Requirement	1,403,850,000	,
		Unprogrammed work:
Future Non-Federal Reimbursement	234,362,800	
Programmed Construction 225,990,800		Entire Project: 22 To be determined
Unprogrammed Construction 8,372,000		PHYSICAL DATA
Estimated Endoral Cost (Liltimate) (CoE)	1 165 427 200	a Doopon the Kill Van Kill and Nowark
Estimated Federal Cost (Ultimate) (CoE) Programmed Construction 1,099,309,200	1,165,437,200	<ul> <li>a. Deepen the Kill Van Kill and Newark</li> <li>Bay from 35 ft to 40 ft then to 45 ft</li> </ul>
Unprogrammed Construction 1,099,309,200  Unprogrammed Construction 66,128,000		b. Deepen the Port Jersey Channel from 35 ft. to 41 ft
Onprogrammed Constituction 60,120,000		c. Deepen the Arthur Kill Channel from its confluence
Estimated Non-Federal Cost	1,314,698,800	
Programmed Construction 1,289,906,800	1,014,000,000	Terminal from 35 ft. to 40 ft and then from 35 ft to
Cash Contribution 739, 541,000		40 ft to the TOSCO Terminal.
Other Costs 324,375,000		d. NY & NJ Harbor: Deepen the above channels from
Reimbursements: 225,990,800		their depths to 50 ft., deepen the Ambrose Channel
Unprogrammed Construction 24,792,000		from 45 ft to 53 ft. the Anchorage Channel from
Cash Contribution 16,420,000		45 ft. to 50 ft. and the Bay Ridge Channel from 40 ft.
Other Costs 0		to 50 ft. Turning areas are provided for the Bay Ridge,
Reimbursements 8,372,000		Arthur Kill and Port Jersey Channels, along with
		mitigation for loss of benthic habitat and air quality
Total Estimated Programmed Construction Costs	\$2,393,266,000	
Total Estimated Unprogrammed Construction Costs	90,920,000	
Total Estimated Project Cost	\$2,484,186,000	

Division: North Atlantic District: New York New York & New Jersey Harbor, NY and NJ

### SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2004	\$508,980,000		
Conference Allowance for FY 2005	95,000,000		
Allocation for FY 2005	84,397,000	1_/	
Allocation through FY 2005	93,377,000		42
Allocation Requested for FY 2006	101,000,000		50
Programmed Balance to Complete after FY 2006	630,923,000		
Unprogrammed Balance to Complete after FY 2006	74,500,000		

<sup>1/</sup> Reflects \$9,920,000 reduction assigned as savings and slippage, \$683,000 rescinded in accordance with FY05 Omnibus Appropriations Act.

JUSTIFICATION: The Port of New York-New Jersey is the largest port on the East Coast, providing more than 228,000 port related jobs, \$12 billion in economic activity, and serves more than 17 million consumers in the States of New York and New Jersey. Through its intermodal links, the Port provides second day access to another 80 million consumers in the northeast and mid-western states (35% of the nation). The Port annually receives and ships over \$82 Billion (110 million long tons) of waterborne general cargo to all parts of the United States and throughout the world and receives petroleum and related products from ports in the Atlantic, and Gulf Coasts, the Caribbean, Africa, and the Persian Gulf.

FISCAL YEAR 2006: The requested amount will be applied as follows:

1.	Continue Construction	Contracts including I	Engineering, Design and S&A	\$95.000.000

a) NY Harbor & Adjacent Channels,

a) iti ilaiboi a hajaboin onaimois,	
Port Jersey, Areas 2B	6,000,000
b) Arthur Kill, Howland Hook Marine Terminal	
Areas 1 & 2	27,000,000
c) NY & NJ Harbor Deepening (50 Feet) Area	
S –KVK-2,A-AM-1 and S-AN-1	43,000,000
d)Award NY & NJ Harbor Deepening (50 Feet) Area	
S –NB-1	19.000.000

2. NY & NJ Harbor Deepening (50 Feet) Engineering and Design 6,000,000

TOTAL \$101,000,000

Division: North Atlantic District: New York New York & New Jersey Harbor, NY and NJ

NON-FEDERAL COSTS: In accordance with the cost sharing and financial concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the Requirements listed below:

REQUIREMENTS OF LOCAL COOPERATION:	Payments During Construction And Reimbursement	Annual Operation, Maintenance and Replacement Costs
Pay 100 percent of costs to modify local service facilities, where necessary, for the construction of the project.	\$ 278,195,000	\$205,000
Pay 25-50 percent of the costs allocated to deep draft navigation during construction. <u>1</u> /	755,961,000	
Pay for all lands, easements, rights of way and relocations	46,180,000	
Pay an additional 10 percent of the costs allocated to deep draft navigation within a period of 30 years following completion of construction which is partially offset by a credit allowed for the value of lands, easements, rights of way, and relocation.	234,362,800	
Contribute 50 percent of the annual charges for interest and amortization of the Federal first cost of the Port Jersey 41-foot project and 50 percent of the operations and maintenance until the improvement is serving/benefiting multiple owners/properties. (Approximately \$3 million annually.) If multiple owners are not established, the contribution could range to a maximum of \$145,629,000.	0	
Total Non-Federal Costs	\$1 314 698 800	\$205,000

Total Non-Federal Costs \$1,314,698,800 \$205,000

1/ The cost sharing percentage of this project includes the cost sharing of the general navigation features deepening to 45 feet at 25 percent and deepening of those features from 45 feet to 50 feet at 50%.

Division: North Atlantic District: New York New York & New Jersey Harbor, NY and NJ

#### STATUS OF LOCAL COOPERATION:

- (1) On the Kill Van Kull and Newark Bay Channels element, a Project Cooperation Agreement for the 45-foot deepening project was executed for the Phase II deepening on 13 January 1999.
- (2) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, the State of New Jersey and the Port Authority of New York and New Jersey (for the limited purpose of indemnification only) are the Non-Federal sponsors of the project. The project cooperation agreement was executed on 23 July 2002.
- (3) On the Arthur Kill, Howland Hook Marine Terminal element, The Port Authority of New York and New Jersey is the non-Federal sponsor for the project. The PCA was executed on 25 July 2002.
- (4) On New York and New Jersey Harbor element, the Port Authority of NY & NJ is the Non-Federal sponsor for the project. The project cooperation agreement was executed on 28 May 2004.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$1,399,800,000 is a decrease from the latest estimate (\$1,761,200,000) presented to Congress (FY 2005).

ITEM AMOUNT
Post Contract Award and Other Estimating Adjustments \$361,400,000
Total \$361,400,000

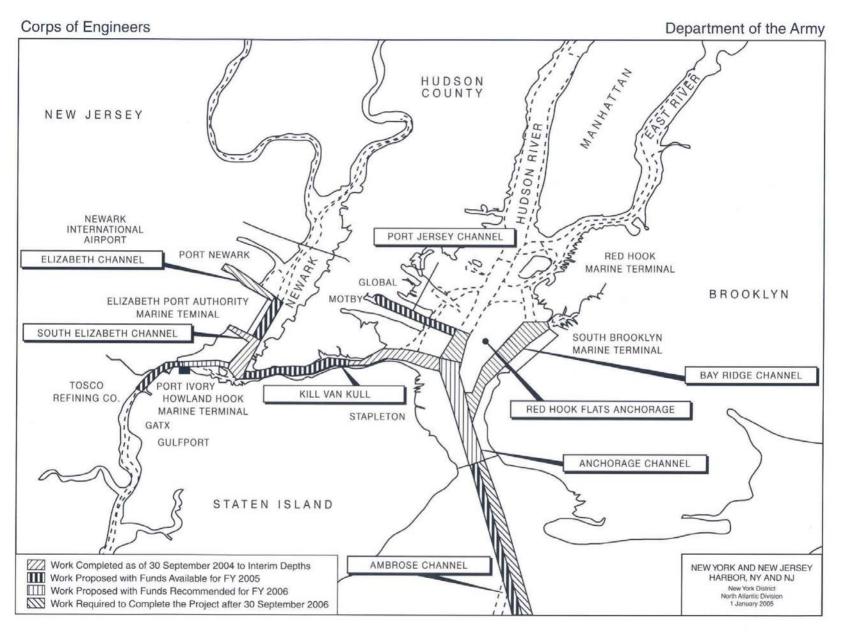
### STATUS OF ENVIRONMENTAL IMPACT STATEMENT:

- (1) On the Kill Van Kull and Newark Bay Channels element, the Final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 31 July 1981. A Supplemental EIS was filed with EPA on 14 February 1986. The Final Supplement to the EIS was filed with EPA on 13 February 1987. The Record of Decision was executed on 1 April 1987. An Environmental Assessment and Finding of No Significant Impact was issued on 30 April 1997 as part of the LRR for the Phase II deepening.
- (2) On NY Harbor and Adjacent Channels, Port Jersey Channel element, the final EIS was filed with the Environmental Protection Agency (EPA) on 29 April 1988, and a final Environmental Assessment and Finding of No Significant Impact was issued June 2000. A Record-of-Decision was executed on 23 October 2000. (3) On the Arthur Kill, Howland Hook Marine Terminal element, the Final Supplemental Environmental Impact Statement was filed with the Environmental Protection Agency on 16 September 1998. A Final Environmental Assessment for mitigation was issued in May 2001. The Record of Decision was executed on 29 August 2001.
- (4) On the 50-foot project, New York and New Jersey Harbor Deepening element, the final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (EPA) on 29 December 1999. The Record-of-Decision was signed on 6 June 2002. An Environmental Assessment and Finding of No Significant Impact was issued in January 2004.

Division: North Atlantic District: New York New York & New Jersey Harbor, NY and NJ

#### OTHER INFORMATION:

- (1) All project elements were being funded separately prior to FY 2002. Congressional direction provided to the Secretary of the Army in the Energy and Water Development Appropriations, FY 2002, Conference Report consolidated the four project elements with the 50-foot deepening project authorized by the Water Resources Development Act of 2000. An updated Project Management Plan for the consolidated project was prepared in January 2003. This plan lays out the construction activities to consolidate ongoing interim depth construction with the overall deepening project. Critical to this analysis is the ongoing extensive close coordination with the States of New York and New Jersey, Port Authority of New York and New Jersey, the Environmental Protection Agency, US Coast Guard, and other interested agencies and public. Additional engineering and environmental analyses will be completed before extensive dredging of the 50-foot channels are undertaken. Individual opportunities to advance work, such as consolidated drilling and blasting in the Kill Van Kull channel which began in FY 2002 will be implemented.
  - (2) On the Kill Van Kull and Newark Bay Channels element, funds to initiate construction were appropriated in FY 1985.
- (3) On the NY Harbor and Adjacent Channels, Port Jersey Channel element, funds to initiate preconstruction engineering and design were appropriated in FY 1988 and funds to initiate construction were appropriated in FY 1994.
- (4) On the Arthur Kill, Howland Hook Marine Terminal element, funds for preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 2001.
- (5) On the 50-foot New York and New Jersey Harbor Deepening element, funds to initiate preconstruction engineering and design were appropriated in FY 2000 and funds to initiate construction were appropriated in FY 2002.



APPROPRIATION TITLE: Construction, General –Navigation Mitigation and Hurricane and Storm Damage Reduction

PROJECT: Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE (Continuing)

LOCATION: Project area is located in Sussex County in Southern Delaware at the entrance to the Delaware Bay. Sussex County is one of three counties in the State of Delaware. It is bordered on the east by the Atlantic Ocean, on the south and west by Maryland, and on the north by Kent County. The study area of Lewes Beach which is situated between the Lewes and Rehoboth Canal and Delaware Bay consists of 2 miles of beach from Roosevelt Inlet to the Cape May-Lewes Ferry Terminal.

DESCRIPTION: The purpose of this project is navigation mitigation and hurricane and storm damage reduction. The project consists of a 25-foot wide berm at an elevation of +8.0 feet NAVD, and a dune at an elevation of +14.0 feet NAVD over a total project length of 1,400 feet. The total project width of the berm and dune, including side slopes, is 100 feet. The plan includes dune grass, dune fencing and suitable advance beachfill and periodic nourishment every six years over the 50-year project life to ensure the integrity of the design. The plan also provides for reconstruction of the south jetty at Roosevelt Inlet.

AUTHORIZATION: Section 101 (a) (13) of WRDA 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 2.7 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 03 February 1999.

Division: North Atlantic District: Philadelphia Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE

7 February 2005

# SUMMARIZED FINANCIAL DATA

Division: North Atlantic

:

Estimated Federal Cost			\$ 28,481,000	)
Programmed Construction		\$	26,947,000	
Initial Construction	\$	4,0	039,000	
Periodic Nourishment	\$	22,	908,000 <u>1</u> /	
Unprogrammed Construction		\$	1,534,000	
Initial Construction	\$		0	
Periodic Nourishment	\$	1,5	34,000 1/	
Estimated non-Federal Cost			\$ 1,519,000	
Programmed Construction		\$	979,000	
Initial Construction	\$	9	79,000	
Cash Contributions	\$ 9	61,0	000	
Other Costs	\$	18,0	000	
Periodic Nourishment	\$		0 <u>1</u> /	
Unprogrammed Construction				
Initial Construction	\$		0	
Periodic Nourishment	\$	54	0,000 <u>1</u> /	
Cash Contributions	\$ 5		000 <u>1</u> /	
Other Costs	\$		0	
Total Programmed Construction			\$ 27,926,000	)
Initial Construction		\$	5,183,000	
Periodic Nourishment		\$	22,743,000	
Total Unprogrammed Construction			\$ 2,074,000	
Initial Construction		\$ \$	0	
Periodic Nourishment		\$	2,074,000	
Total Estimated Project Cost			\$ 30,000,000	)
Initial Construction		\$	5,183,000	
Periodic Nourishment		\$	24,817,000	

STATUS: PERCENT COMPLETION
(1 Jan 2005) COMPLETE SCHEDULE
Initial Beachfill 100 Sep 2005

Periodic Nourishment 0 To be determined Entire Project 0 To be determined

# PHYSICAL DATA:

Beachfill: 25-foot wide berm at an elevation of +8.0 feet NAVD and 75-foot wide dune at an elevation of +14.0 feet NAVD over a total project length of 1,400 feet. Dune grass and dune fencing. Periodic Nourishment: every 6 years.

# SUMMARIZED FINANCIAL DATA: (continued)

ACCUMULATED PCT OF EST FED. COST

Allocations to 30 September 2004	\$ 3,727,000	
Conference Allowance for FY 2005	\$ 352,000	
Allocation for FY 2005	\$ 312,000 <u>2</u> /	
Allocations through FY 2005	\$ 4,039,000	14
Allocations Requested for FY 2006	\$ 10,000 <u>3</u> /	14
Programmed Balance to Complete after FY 2006	\$ 22,898,000 <u>1</u> / <u>3</u> / <u>4</u> /	
Unprogrammed Balance to Complete after FY 2006	\$ 1,534,000 <u>1</u> /	

1/ 91.7 percent of project costs are allocable to the restoration of sand losses from operation and maintenance of Federal navigation structures at Roosevelt Inlet and Cape Henlopen. As authorized, the project provides that this portion be cost shared 90 percent Federal and 10 percent non-Federal, and that the remaining 8.3 percent of costs, which are allocable to storm damage reduction, be cost shared 65 percent Federal and 35 percent non-Federal. However, the budget proposes that 100 percent of the costs of renourishment allocable to the correction of navigation impacts (in this case, 91.7 percent of all costs) be paid with Civil Works funds. Accordingly, the figures displayed reflect the reassignment of \$4,981,000 of renourishment costs from the non-Federal sponsor to Civil Works. The Federal share of the other costs of renourishment (in this case, 8.3 percent) is not programmed.

- 2/ Reflects \$37,000 assigned as savings & slippages, \$3,000 rescinded under the FY05 Omnibus Appropriation Act
- 3/ Under legislation proposed in the FY2006 Budget, funds will be derived from the Harbor Maintenance Trust Fund.
- 4/ Reflects mitigation portion of project

JUSTIFICATION: The operation and maintenance of Federal navigation works in the vicinity of Lewes Beach contribute to the shoreline erosion at Lewes Beach. These navigation works include a breakwater that provides a harbor of refuge inside Cape Henlopen and jetties and a navigation channel at Roosevelt Inlet. The Federal navigation works have interrupted the natural longshore sand transport, resulting in accelerated shoreline erosion at Lewes Beach and a greater risk of damages from hurricanes and coastal storms.

Despite storm damage reduction measures undertaken by both Federal Government and the State of Delaware, sections of the shoreline in the project area continue to show signs of progressive erosion. The long term erosion of the beachfront along the Delaware Bay has resulted in a persistent reduction in storm damage protection. The proximity of roads to the shoreline and the concentration of homes in Lewes Beach can result in significant economic damages in the event of a major storm. The highest elevation of water recorded for Lewes, DE was 7.1 feet (NAVD) for the March 1962 northeaster. Storm damages were estimated at \$5.4 million at that time along the Delaware bayshore communities. Storm damages at Lewes Beach were estimated at \$1.6 million. Average annual benefits are \$602,000 (October 1998 price level).

FISCAL YEAR 2006 The requested amount will be applied as follows:

Environmental Monitoring \$10,000 Total \$10,000

Division: North Atlantic District: Philadelphia Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE

NON-FEDERAL COST: In accordance with section 101(a)(13) of the Water Resources Development Act of 1999, the costs allocable to the restoration of sand losses from operation and maintenance of Federal navigation projects (91.7 percent) shall be cost shared 90 percent Federal and 10 percent non-Federal, and the remaining costs (8.3 percent), which are allocable to storm damage reduction, shall be cost shared 65 percent Federal and 35 percent non-Federal. However, the budget proposes that 100 percent of the costs of renourishment allocable to the correction of navigation impacts be paid with Civil Works funds. Accordingly, the figures displayed reflect that \$1,411,000 have been reassigned from the non-Federal sponsor to Civil Works.

	Co Re	nyments during onstruction and eimbursement	Ma	nual Operation, aintenance, and eplacement Costs
Provide all lands, easements, rights-of-way, and relocations.	\$	18,000		
Provide 10 percent of the initial costs of construction allocable to correction of the impacts of Federal navigation operation and maintenance (91.7 percent of costs)	\$	881,000		
Provide 35 percent of the initial costs of construction allocable to storm damage reduction (8.3 percent of costs).	\$	80,000		
Provide 35 percent of the costs of periodic renourishment allocable to storm damage reduction.	\$	540,000		
Bear all costs of operation, maintenance, repair, replacement, and rehabilitation of the completed project.			\$	17,000
Total Non-Federal Cost	\$	1,519,000	\$	17,000

STATUS OF LOCAL COOPERATION: The Delaware Department of Natural Resources & Environmental Control (DNREC) is the non-Federal sponsor. The Project Cooperation Agreement (PCA) was executed in November 2002.

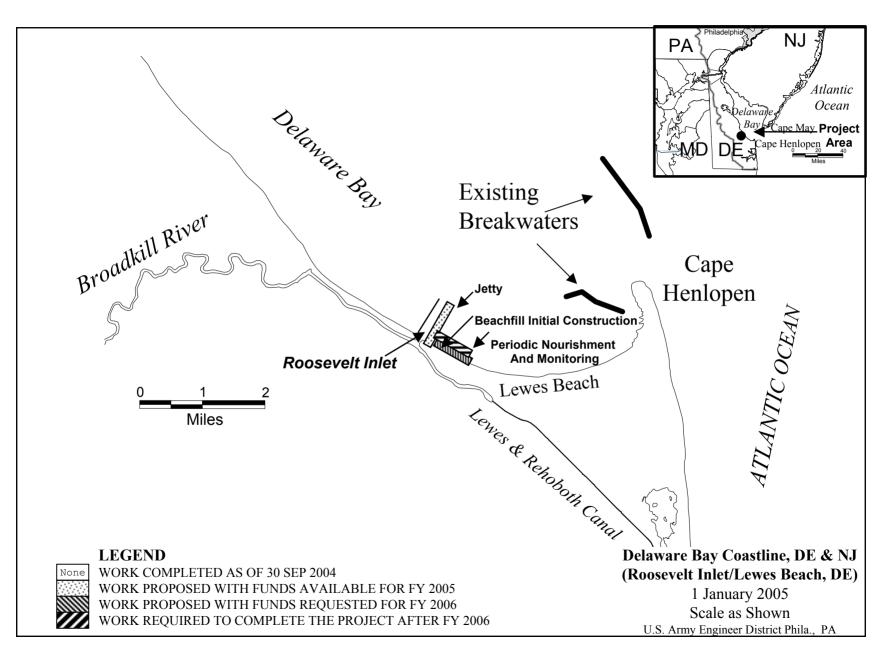
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$28,481,000 is a decrease of \$2,919,000 from the latest estimate (\$31,400,000) presented to Congress (FY 2004). This change includes the following item:

Item Amount
Post-Contract Award Adjustments in Estimates -\$ 7,907,000
Reassignment of costs to Civil Works +\$ 4,981,000
Total -\$ 2,919,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in May 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up work for such projects, except in those cases where the operation and maintenance of Federal navigation projects contributed to the erosion of the shoreline.

Division: North Atlantic District: Philadelphia Delaware Bay Coastline, Roosevelt Inlet to Lewes Beach, DE



APPROPRIATION TITLE: Construction General - Beach Erosion Control

PROJECT: Cape May Inlet to Lower Township, New Jersey (Continuing)

LOCATION: The site of the recommended project is located on the Atlantic Coast of New Jersey, approximately 38 miles southwest of Atlantic City. It includes the communities of Cape May City including the United States Coast Guard Training Center and Lower Township in Cape May County.

DESCRIPTION: The plan of improvement consists of construction of two groins and placing beachfill and periodic nourishment which are programmed and the construction of a weir breakwater which is unprogrammed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 3.4 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.8 to 1 at 7 percent.

BASIS OF BENEFIT-COST RATIO: Cape May Inlet to Lower Township, New Jersey, Benefits Reevaluation Report approved March 1988 at June 1987 price levels.

SUMMARIZED FINANCIAL DATA		STATUS: (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
	118,475,000 <u>1</u> / 3110,631 000	Initial Construct Breakwaters Entire Project	ion 100 0 29	June 1991 Indefinite <u>1</u> / Indefinite 1/
Periodic Nourishment \$104,701,000		PHYSICAL DA		
Unprogrammed Construction \$ Initial Construction \$7,844,000 Periodic Nourishment 0	· , - · · , <u>- ·</u>	360-786 feet V	Veir Breakwater	), 25-180 foot width Groins: 7 existing and 2 new groins: 2,560 linear feet rubble mound cubic yards per year

<sup>1/</sup> Completion of the breakwater element is indefinite pending a decision to construct this feature.

Division: North Atlantic District: Philadelphia Cape May Inlet to Lower Township, NJ

SUMMARIZED FINANCIAL DATA (Continued)

Estimated Federal Cost (USCG) \$12,804,000 1/

Programmed Construction \$8,476,000

Initial Construction 3,458,000 Periodic Nourishment 5,018,000

Unprogrammed Construction \$ 4,328,000 1/

Initial Construction 4,328,000 Periodic Nourishment 0

Estimated Non-Federal Cost \$3,021,000 1/

Programmed Construction \$ 2,150,000

Initial Construction \$656,000

Cash Contributions 656,000 Other Costs 0

Periodic Nourishment \$1,494,000

Cash Contributions \$1,494,000

Other Costs 0

Unprogrammed Construction \$871,000

Initial Construction \$871,000

Cash Contributions 871,000 Other Costs 0

Total Estimated Programmed Construction \$121,257,000 <u>1/</u>

Initial Construction 10,044,000 Periodic Nourishment 111,313,000

Total Estimated Unprogrammed Construction Cost \$13,043,000

Initial Construction 13,043,000 Periodic Nourishment 0

Total Estimated Project Cost \$134,300,000 1/

Initial Construction 23,087,000 Periodic Nourishment 111,213,000

Division: North Atlantic District: Philadelphia

7 February 2005

Cape May Inlet to Lower Township, NJ

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ACCUM. PCT. OF EST. FED COST

SUMMARIZED FINANCIAL DATA (Continued) Allocations to 30 September 2004 \$22.925.000 Conference Allowance for FY 2005 182,000 Allocation for FY 2005 162,000 2/ Allocations through FY 2005 23.087.000 29 Allocations Requested for FY 2006 1,900,000 3/ 32 Programmed Balance to Complete after FY 2006 85,644,000 1/3/ Unprogrammed Balance to Complete after FY 2006 7.844.000

1/ 100 percent of project costs are allocable to the restoration of sand losses from operation and maintenance of Cape May Inlet. As authorized, the project provides that a portion of costs be allocated to the United States Coast Guard, and costs not assigned to the Coast Guard be cost shared 90 percent Federal and 10 percent non-Federal. However, the budget proposes that 100 percent of the costs of renourishment allocable to the correction of navigation impacts (in this case, 100 percent of all costs) be paid with Civil Works funds. Accordingly, \$34,596,000 of the figures displayed are reassigned from the Coast Guard to Civil Works and \$5,679,000 is reassigned from the non-Federal sponsor to Civil Works.

- 2/ Reflects \$19,000 assigned as savings and slippages and \$1,000 rescinded in accordance with FY05 Omnibus Appropriation Act
- 3/ Under legislation proposed in the FY06 budget, funds will be derived from the Harbor Maintenance Trust Fund.

JUSTIFICATION: The project area has experienced substantial erosion since the construction of the Cape May Inlet jetties in 1911 by the Federal Government. The jetties interrupt the natural movement of sand along the coast which serves to replenish downdrift beach areas. The City of Cape May and State of New Jersey have spent nearly \$4 million since 1945 to combat the resulting erosion. This erosion has left Cape May with little or no protective beach, thus endangering many hotels, small businesses, prominent homes, and a U.S. Coast Guard Training Center. This project would partially restore the beaches of Cape May lost as the direct result of the Cape May Inlet jetties. The potential for future storm damages and maintenance of the seawall would be greatly reduced. The commercial tourism industry would also be enhanced by the provision of sufficient beach area for recreational usage. The project prevented approximately \$9 million worth of damages during the 3-5 January 1992 storm, and approximately \$500,000 in damages during the 7-8 January 1996 storm.

Federal facilities have existed at the present site since the establishment of a U.S. Navy Section Base in 1918. The U.S. Coast Guard became the sole occupant in 1948 when the Recruit Training Center was transferred from Florida. In addition to being the sole site for Coast Guard recruit training for the entire nation, the site also includes a Group/Air Station complex, a Search and Rescue Station, a small boat maintenance facility, and berths for four cutters ranging from 82 to 210 feet in length. The Commandant of the U.S. Coast Guard (USCG) offered to seek funds to support a cost-shared project with the Corps of

ranging from 82 to 210 feet in length. The Commandant of the U.S. Coast Guard (USCG) offered to seek funds to support a cost-shared project with the Corps of Engineers, because of the erosion at the Training Center and the need for a cooperative effort to solve the problem. The average annual benefits are \$3,993,000 at June 1987 price levels. These include annual storm damage reduction benefits of \$2,977,000, reduced annual maintenance costs of \$160,000, and annual recreation benefits of \$856,000.

FISCAL YEAR 2006; The requested amount will be applied as follows:

Continue construction \$1,900,000

Total \$1,900,000

Division: North Atlantic District: Philadelphia Cape May Inlet to Lower Township, NJ

NON-FEDERAL COST: In accordance with Section 101 of the Water Resources Development Act of 1986, costs of constructing measures for mitigation of erosion damages attributable to the Federal navigation project at Cape May Inlet shall be shared in the same proportion as the cost sharing provisions applicable to the original project at Cape May Inlet. The original project was constructed at a Federal cost of approximately \$900,000 with a local contribution of \$100,000. The distribution of initial costs between the USCG and Cape May City is based on the ratio of benefits accrued by the feeder beach between the two locations. Costs for the remaining features of the recommended project will be allocated to Cape May City. As the project is authorized, the non-Federal sponsor must pay 10 percent of the cots not assigned to the Coast Guard. However, the budget proposes that 100 percent of the remaining costs of renourishment allocable to the correction of navigation impacts (in this case, 100 percent of all costs) be paid with Civil Works funds. Accordingly, the figures displayed reflect a reduction of \$5,245,000 reassigned from the non-Federal sponsor to Civil Works.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Reimbursement Costs
Make cash contributions equal to 10 percent of the initial construction cost and 10 percent of periodic nourishment and monitoring through FY2005.	\$ 3,021,000	
Total Non-Federal Costs	\$ 3,021,000	\$0

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey. A Memorandum of Agreement with the USCG was executed on 4 August 1988. A Local Cooperation Agreement with the State of New Jersey was executed on 31 October 1988.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate (Corps of Engineers) of \$118,475,000 is an increase of \$22,675,000 from the latest estimate (\$95,800,000) presented to Congress (FY 2004). This change includes the following items:

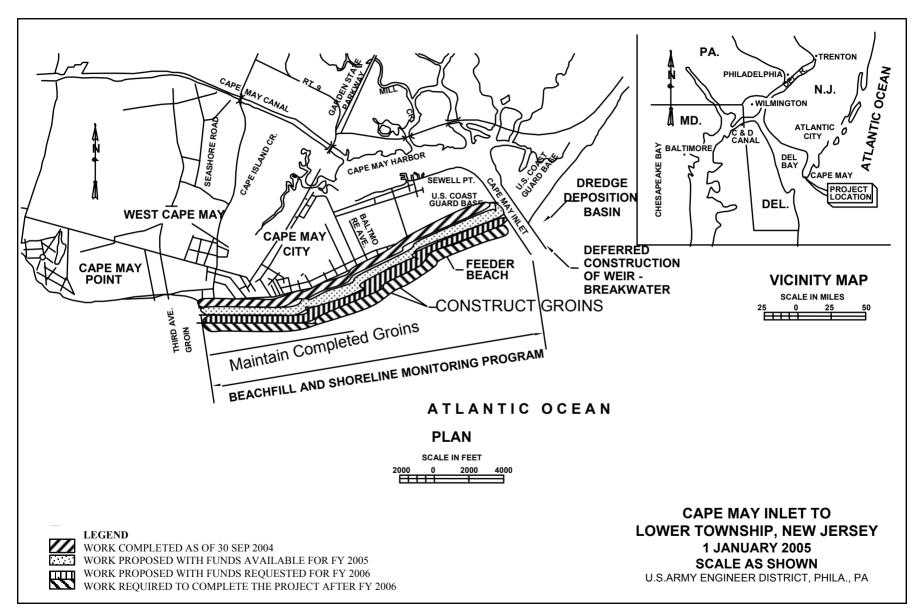
Price Escalation on Construction Features - \$17,600,000 Reassignment of costs to Civil Works +\$40,275,000

Total +\$22,675,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Council on Environmental Quality on 8 October 1976 and a Final Supplement was filed with the Environmental Protection Agency on 14 August 1981. Listing of Piping Plover (Charadrius Melodus) as an endangered bird species in January 1986 and the recent determination by State wildlife officials that the species nests in the project area have necessitated informal consultation in accordance with Section 7 of the Endangered Species Act of 1973. A letter from U.S. Fish and Wildlife Service, dated 20 August 1987 determined that the proposed project is not likely to adversely affect the Piping Plover, provided an operational window is observed. Coordination with the Service is continuing.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1978. Funds to initiate construction were appropriated in FY 1986.

Division: North Atlantic District: Philadelphia Cape May Inlet to Lower Township, NJ



APPROPRIATION TITLE: Construction, General – Navigation Mitigation, Ecosystem Restoration, Hurricane & Storm Damage Reduction

PROJECT: Lower Cape May Meadows, Cape May Point, NJ (Continuing)

LOCATION: Project area includes Lower Cape May Meadows and the Borough of Cape May Point and extends some 2 miles along the southern Atlantic coast of New Jersey.

DESCRIPTION: The plan consists of a dune/berm 20 feet wide extending for a total length of 10,050 feet; planting of 18 acres of dune vegetation; seaward restoration of 35 acres of emergent wetland; elimination of 95 cares of the nuisance plant Phragmites australis; planting of 105 acres of wetland vegetation; creation of drainage ditches; installation of two weir-flow control structures; creation of six fish reservoirs; and construction of elements to create 25 acres of tidal marsh. The project also includes 650,00 cubic yards of periodic nourishment every 4 years over the 50-year project life, and monitoring and adaptive management over a 5-year period for the Lower Cape May Meadows freshwater wetlands restoration element.

AUTHORIZATION: Section 101 (a) (25) of WRDA 1999.

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 to 1 at 7 percent – Does not include ecosystem restoration portion

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7 percent – Does not include ecosystem restoration portion

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 7 percent – Does not include ecosystem restoration portion

BASIS OF BENEFIT-COST RATIO: Benefits and costs (October 1998 price level) are based on the Chief of Engineers Report dated 05 April 1999.

				PHYSICAL
SUMMARIZED FINANCIAL DATA:		STATUS:	PERCENT	COMPLETION
		(1 Jan 2005)	COMPLETE	SCHEDULE
Estimated Federal Cost	\$103,620,000 <u>3</u> /	Initial Beachfill	41	May 2006
Initial Construction	\$ 12,771,000	Fish & Wildlife	0	Sept 2006
Periodic Nourishment	\$ 90,849,000	Entire Project	0	To be determined
Estimated Non-Federal Cost	\$ 11,980,000 <u>3</u> /	PHYSICAL DATA	4	
Initial Cost	\$ 4,044,000	Dune/berm: 20	feet wide; total le	ngth 10,050 ft
Cash Contribution \$ 3,886	5,000	Plantings: 158 ad	cres of dune, eme	ergent wetland and wetland
Other \$ 158	3,000	Creation of Weir-	flow Control Stru	ctures and fish reservoirs; New tidal
Periodic Nourishment \$ 7,936	,000	marsh: 25 acres		
Cash \$ 7,936,000		Monitoring and a	daptive managen	nent: 5 years
Total Estimated Project Cost	\$ 115,600,000 <u>3</u> /	Periodic Nourish	ment: 4 year cyc	le for 50 years with monitoring

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ

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# SUMMARIZED FINANCIAL DATA: (continued)

ACCUM. PCT. OF EST. FED COST Allocations to 30 September 2004 1,183,000 Conference Allowance for FY 2005 5,164,000 Allocation for FY 2005 4.588.000 1/ 5,771,000 5 Allocations through FY 2005 Allocation Requested for FY 2006 7,000,000 12 Programmed Balance to Complete after FY 2006 \$ 76,111,000 2/3/ Unprogrammed Balance to Complete after FY 2006 \$ 14,738,000

### 2/ Reflects nourishment for mitigation portion of project

<u>3</u>/ 63 percent of project costs are allocable to the restoration of sand losses from operation and maintenance of Cape May Inlet. As authorized, the project provides that this portion be cost shared 90 percent Federal and 10 percent non-Federal, and that the remaining 37 percent of costs, which are allocable to storm damage reduction, be cost shared 65 percent Federal and 35 percent non-Federal. However, the budget proposes that 100 percent of the costs of renourishment allocable to the correction of navigation impacts (in this case, 63 percent of all costs) be paid with Civil Works funds. Accordingly, \$14,340,000 of renourishment costs would be reassigned from the non-Federal sponsor to Civil Works. The Federal share of the other costs of renourishment (in this case, 37 percent) is not programmed

JUSTIFICATION: The operation and maintenance of the Federal navigation project at Cape May Inlet have contributed to the shoreline erosion at Lower Cape May Meadows, resulting in the direct loss of beach and unique freshwater wetland habitat. Erosion to the dune system has left the remaining freshwater ecosystem in The Meadows substantially degraded through saltwater intrusion and subsequent topographical alteration by allowing ocean water overtopping during storm events. Since 1991, the dunes protecting the wetlands have been breached six times, resulting in saltwater intrusion to the freshwater wetlands. Very few plant or animal species have the adaptations needed to survive such large fluctuations or range of salinities (freshwater to saltwater). The saltwater intrusion has also encouraged the subsequent proliferation of the nuisance plant species Phragmites australis, also know as common reed. These conditions have significantly reduced the ability of the wetlands to support the wildlife and endangered plant species which reside there. It is estimated that an additional 147 acres of habitat will be lost by the year 2050 if shoreline erosion continues unabated.

Compounding the problem is the hydraulic/hydrologic relationship between Lower Cape May Meadows and the communities of Cape May Point and West Cape May. During storm events, Lower Cape May Meadows serves as a buffer between the ocean and the surrounding developed areas. When the Meadows area is inundated during storm events, the storm waters flow the low lying areas of Cape May Point and the developed portions of Lower Township and West Cape May.

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ

<sup>1/</sup> Reflects \$539,000 assigned as savings and slippages and \$37,000 rescinded in accordance with FY05 Omnibus Appropriation Act.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Complete Initial Construction \$ 6,860,000
Planning, Engineering and Design
Construction Management \$ 100,000

Total \$ 7,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below:

Provide all lands, easements, rights-of-way, and relocations.	Payments during Construction and Reimbursement \$ 158,000	Annual Operation, Maintenance, and Replacement Costs
Provide 35 percent of the initial construction costs assigned to non-mitigation portion of the project for hurricane and storm damage and ecosystem restoration	\$ 3,193,000	
Provide 10 percent of the initial construction costs assigned to mitigation portion of the project prior to FY 2006	\$ 693,000	
Provide 35 percent of the costs of periodic renourishment allocable to storm damage reduction.	\$ 7,936,000	
Total Non-Federal Cost	\$ 11,980,000	

STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement was signed with NJ Department of Environmental Protection on 28 July 2003.

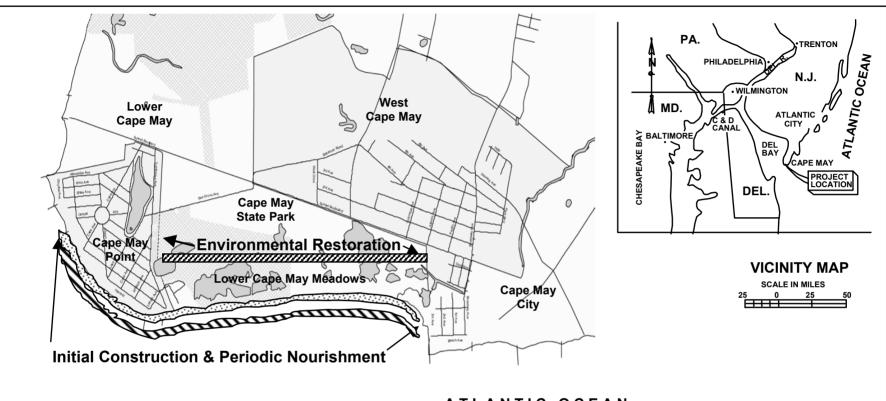
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$103,620,000 is a decrease of \$18,280,000 from the latest estimate (\$121,900,000) presented to Congress (FY 2005). This change includes the following items:

Price Escalation On Construction Features - 32,620,000
Reassignment of Costs to Civil Works +14,340,000
Total - 18,280,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in November 1998.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1999. Funds to initiate construction were appropriated in FY 2002. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up work for such projects, except in those cases where the operation and maintenance of Federal navigation projects contributed to the erosion of the shoreline.

Division: North Atlantic District: Philadelphia Lower Cape May Meadows, Cape May Point, NJ



# ATLANTIC OCEAN

# **PLAN**

SCALE IN FEET
2000 0 2000 4000



**LEGEND** 

WORK COMPLETED AS OF 30 SEP 2004
WORK PROPOSED WITH FUNDS AVAILABLE FOR FY 2005
WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2006
WORK REOUIRED TO COMPLETE THE PROJECT AFTER FY 2006

LOWER CAPE MAY MEADOWS TO CAPE MAY POINT, NEW JERSEY 1 JANUARY 2005 SCALE AS SHOWN

U.S.ARMY ENGINEER DISTRICT, PHILA., PA

APPROPRIATION TITLE: Construction, General – Shoreline Protection

PROJECT: Townsends Inlet to Cape May Inlet, New Jersey (Continuing)

LOCATION: The site of the recommended project is located on the Atlantic Coast of New Jersey, approximately 23 miles southwest of Atlantic City. It includes the communities of Avalon, Stone Harbor, and North Wildwood.

DESCRIPTION: The recommended project consists of five reaches for shoreline protection for Avalon, Stone Harbor and North Wildwood, NJ, and an environmental restoration project for Stone Harbor Point. The shoreline protection portion of the project includes: (1) the construction of stone seawalls for the first and second reaches at the inlet frontages at Avalon and North Wildwood with seawalls at top elevations of 14 feet and 13 feet above mean low water respectively, extending for approximately 2,970 linear feet in Avalon and 8,660 linear feet in North Wildwood and would encompass the existing non-Federal bulkheads, rock revetments, and seawalls; and (2) the placement of 4.6 million cubic yards of initial beachfill with 800,000 cubic yards of periodic nourishment every three years for the third and fourth reaches for the oceanfronts of Avalon and Stone Harbor (Seven Mile Island). The beach fill segments will provide berm widths of 150 feet at elevation 8.5 feet above mean low water. The dunes would have a total length of 22,500 feet, a crest width of 25 feet, and would include dune grass plantings and sand fencing. The ecosystem restoration portion of the project includes an oceanfront berm 150 feet wide with a crest width of 25 feet at elevation 8.5 feet above mean low water for the fifth reach at Stone Harbor Point. This berm would extend 1,000 linear feet southwest of the terminal groin in Stone Harbor. The plan also includes the planting of approximately 3 acres of dune grass and 64 acres of bayberry and eastern red cedar. No periodic nourishment would be included with this project feature.

AUTHORIZATION: Water Resource Development Act 1999, Section 101(a)(26).

REMAINING BENEFIT-REMAINING COST RATIO: 3.5 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 7 percent

BASIS OF BENEFIT-COST RATIO: Townsends Inlet to Cape May Inlet feasibility study. Chief's Report dated 28 September 1998

Division: North Atlantic District: Philadelphia Project: Townsends Inlet to Cape May Inlet, NJ

#### SUMMARIZED FINANCIAL DATA

Estimated Federal Cost \$ 146,000,000 Initial Construction \$ 47,500,000 Periodic Nourishment 98,500,000

Estimated non-Federal Cost \$80,385,000

Initial Construction 27,385,000
Cash Contributions 25,695,000
Other Costs 1,690,000
Periodic Nourishment 53,000,000
Cash Contributions 53,000,000

Other Costs 0

Total Estimated Project Cost \$ 226,385,000

Initial Construction 74,885,000 Periodic Nourishment 151,500,000 STATUS: PERCENT COMPLETION (1 Jan 2005) COMPLETE SCHEDULE

Initial Beachfill 100 Sept 2004

Periodic Nourishment 0 To be determined Seawalls 0 To be determined Ecosystem Restoration 0 To be determined Entire Project 0 To be determined

### PHYSICAL DATA:

Stone Harbor Point: 4.3 miles of beachfill, berm width of 150-foot

and dune height of +16-feet. Avalon and Stone Harbor 2.2 miles of seawall construction

Stone Harbor Point: Ecosystem restoration of approximately

107 acres of natural barrier island with beach fill and dune construction with periodic nourishment and planting of 67 acres of bayberry and red cedar roosting habitat

# ACCUMULATED

Allocations to 30 September 2004	\$ 20,159,000	PCT OF EST.
Conference Allowance for FY 2005	\$ 12,600,000	FED. COST
Allocation for FY 2005	\$ 11,193,000 <u>1</u> /	
Allocations through FY 2005	\$ 31,352,000	21
Allocations Requested for FY 2006	\$ 11,600,000	29
Programmed Balance to Complete after FY 2006	\$ 4,548,000	
Unprogrammed Balance to Complete after FY 2006	\$ 98.500.000	

<sup>1/</sup> Reflects \$1,316,000 assigned as savings and slippages and \$91,000 rescinded in accordance with FY05 Omnibus Appropriation Act.

JUSTIFICATION: The area has been subjected to major flooding, erosion and wave attack during storms, causing damage to structures, and, since 1992, was declared a National Disaster Area by the President of the United States on three separate occasions. In recent years, continued erosion has resulted in a reduction of the height and width of the beachfront, which has increased the potential for storm damage. In addition, valuable fish and wildlife habitat along the southern end of Stone Harbor has been lost to erosion.

Division: North Atlantic District: Philadelphia Project: Townsends Inlet to Cape May Inlet, NJ

FISCAL YEAR 2006: The requested amount will be applied as follows:

Continue initial construction \$ 9,800,000 Engineering & Design during Initial Construction \$ 100,000 Construction Management During Initial Construction \$ 1,700,000 Total \$ 11,600,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Payments During Annual Operation, Construction Maintenance, and and Reimbursements Replacement Costs Requirements of Local Cooperation Provide lands, easements, and rights of way 100.000 Modify or relocate utilities, roads, bridges, Other facilities, where necessary for the construction of the project. \$ 1,590,000 Pay 35 percent of the all costs allocated to hurricane and storm damage reduction and ecosystem restoration \$ 25,695,000 Pay 35 percent of costs allocated to periodic nourishment/monitoring \$ 53,000,000 Total Non-Federal Costs \$ 80.385.000

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the State of New Jersey Department of the Environmental Protection (NJDEP). The Project Cooperation Agreement was executed in March 2002.

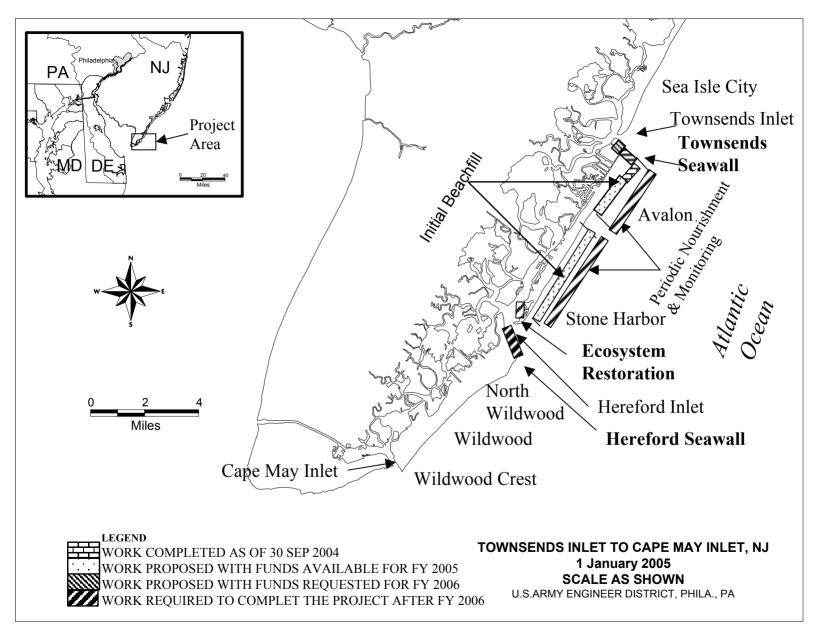
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$146,000,000 is a decrease of \$90,000,000 from the latest estimate (\$236,000,000) presented to Congress (FY 2005). This change includes the following items:

ItemAmountPrice Escalation on Construction Features- \$90,000,000Total- \$90,000,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was completed in March 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997. Funds to initiate construction were appropriated in FY 2001. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up work for such projects, except in those cases where the operation and maintenance of Federal navigation projects contributed to the erosion of the shoreline.

Division: North Atlantic District: Philadelphia Project: Townsends Inlet to Cape May Inlet, NJ



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Fire Island Inlet to Montauk Point, New York (Continuing)

LOCATION: The overall project area, extends from Fire Island Inlet easterly to Montauk Point along the Atlantic Coast of Suffolk County. The project is about 83 miles long and comprises about 70 percent of the total ocean frontage of Long Island. Fire Island Inlet is located about 50 miles by water East of the Battery, New York City.

DESCRIPTION: The project provides for beach erosion control and hurricane protection along five reaches of the Atlantic Coast of New York from Fire Island Inlet to Montauk Point. Work includes widening the beaches along the developed areas to a minimum width of 100 feet at an elevation of 14 feet above mean sea level and by raising dunes to an elevation of 20 feet above mean sea level from Fire Island Inlet to Hither Hills State Park and at Montauk and opposite Lake Montauk Harbor, supplemented by grass planting on the dunes, interior drainage structures, construction of up to 50 groins, and subsequent periodic beach nourishment. A reformulation study is underway to evaluate storm damage protection measures. An interim project at Westhampton Beach has been constructed prior to completion of an ongoing overall project reformulation effort. This interim project provides for 30 years of periodic nourishment to maintain a beach berm extending westwardly from Groin 15 to Moriches Inlet at an elevation of 9.5 feet above mean sea level backed by a dune with a height of +15 feet above msl. The Westhampton Beach Interim project also includes tapering of the existing westernmost two groins, construction of a new groin between groins 14 and 15, and beachfill as necessary within the existing groinfield to promote sand transport. A Breach Contingency Plan has been developed which permits closing of breaches of the barrier island with use of a pre-approved Project Cooperation Agreement format, provided that estimated breach costs are no greater than \$5 million. A Decision document was finalized and approved in July 2002 for an interim project to protect the area west of Shinnecock Inlet. This interim project provides for initial beachfill which was initiated in September 2004, in conjunction with the second nourishment of the Westhampton Interim Project. The study for an interim project along Fire Island has been discontinued due to lack of a Non-Federal sponsor.

AUTHORIZATION: River and Harbor Act 14 July 1960, modified by the Water Resources Development Act of 1974, the Water Resources Development Act of 1986, and the Water Resources Development Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable for budgeted work

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent (FY 1963).

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

SUMMARIZED FINANCIAL	DATA	
Estimated Federal Cost Programmed Construction Initial Construction Periodic Nourishment	154,10 67,000,000 87,100,000	591,100,000 00,000
Unprogrammed Construction Initial Construction Periodic Nourishment	113,4 323,600,000	00,000
Estimated Non-Federal Cos Programmed Construction Initial Construction Cash Contributions Other Costs Periodic Nourishment Cash Contribution Other Costs		295,200,000 00,000
Unprogrammed Construct Initial Construction Cash Contributions Other Costs Periodic Nourishment Cash Contribution Other Costs	ion 61,100,000 48,850,000 12,250,000 175,400,000 175,400,000	236,500,000
Total Estimated Programme Initial Construction Periodic Nourishment	86,500,000 126,300,000	212,800,000
Total Estimated Unprogram Cost Initial Construction Periodic Nourishment	174,500,000 499,00,000	673,500,000
Total Estimated Project Cos Initial Construction Periodic Nourishment	261,000,000 625,300,000	886,300,000

STATUS:	PERCENT	COMPLETION
(1 Jan 2005)	COMPLETE	SCHEDULE
Reach 2	100	Oat 1066
11 groins	100	Oct 1966
4 groins	100	Nov 1970
8 groins	0	<u>1</u> /
Westhampton Interim	40	To be determined
Initial Construction	100	Dec 1997
Periodic Nourishment	: 10	To be determined
West of Shinnecock Interim		
Initial Construction	20	Mar 2005
Periodic Nourishmer	nt 10	To be determined
Balance of Reach	0	<u>1</u> /
Reach 4		_
2 groins	100	Sep 1965
Beach Fill-18.4 mi.	0	<u>1</u> /
Balance of Project		
Dune/Beach Fill-39.7 n	ni 0	<u>1</u> /
27 groins	0	<u>1</u> / 1/
Reformulation Study	60	To be determined
Studies for Interim Proje	ects	
Fire Island	90	2/
West of Shinnecock	100	Dec 2002
Beach Contingency Plan	100	Jan 1996
2000		22 230

# PHYSICAL DATA

Dunes and beach replenishment:73,5 miles

Dunes: raise to elevation 20 feet above msl Beaches: widen to a minimum of 100 ft Interior drainage structures: 3 gated culverts

Groins: 52

Periodic nourishment: 480,000 cubic yards/yr

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

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 <sup>1/</sup> Schedule is dependent on the outcome of the Reformulation effort.
 2/ Study terminated due to lack of a non-federal sponsor and environmental issues that will be addressed in the overall reformulation effort

	ACCUM. PCT. OF EST. FED. COST
00 407 000	FED. COST
68,137,000	
8,000,000	
7,107,000 <u>1</u> /	
75,244,000	13
800,000	13
78,056,000	
437,000,000	
	7,107,000 <u>1</u> / 75,244,000 800,000 78,056,000

<sup>1/</sup> Reflects \$835,000 reduction assigned as savings and slippage, \$58,000 rescinded in accordance with the FY 05 Omnibus Appropriations Act.

JUSTIFICATION: Erosion has seriously reduced the width of the shoreline in the study area with consequent exposure of the shore and the mainland to wave attack and inundation damages. A recurrence of the hurricane tide of record (September 1938) when 45 lives were lost, would cause inundation and wave damage estimated at \$717,000,000 (April 1996 price levels). As a result of the 11 December 1992 storm, in the Westhampton area (Section 1B of Reach 2), over 200 residential structures were destroyed and two breaches of the barrier island occurred. Closure costs for these breaches in 1992 was approximately \$6,600,000.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Continue West of Shinnecock (Environmental Monitoring)	400,000
Continue (Westhampton Beach)(Environmental Monitoring)	400,000

Total \$ 800,000

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

NON-FEDERAL COSTS: Local interests are required to bear 30 percent of the total project cost including periodic nourishment, for the Westhampton Interim project and 35 percent of the total project cost for the Reformulation project, which includes the value of lands, easements, and rights-of-way.

Requirements of Local Cooperation:	Payments During Construction and Reimbursements	Annual Operation Maintenance and Replacement Costs
Provide all lands, easements, and rights-of-way, and relocations.	\$ 12,950,000	
Pay 30 percent of the first costs for the Westhampton Interim	67,650,000	\$0
project and 35 percent of the first costs for the remainder of the project including creditable lands and easements and rights of way, and bear all costs of operation and maintenance and replacement of storm damage reduction facilities.		
Pay 35 percent of the periodic nourishment cost	214,600,000	
Total Non-Federal Costs	\$ 295,200,000	\$0

STATUS OF LOCAL COOPERATION: The agency responsible for local cooperation is the New York State Department of Environmental Conservation (NYSDEC). Assurances of local cooperation were executed by the NYSDEC on 14 August 1963 and accepted by the Federal Government on 20 August 1963. A project cooperation agreement (PCA) for the Westhampton Interim project was executed in February 1996. A PCA for the West of Shinnecock project was executed in December 2003.

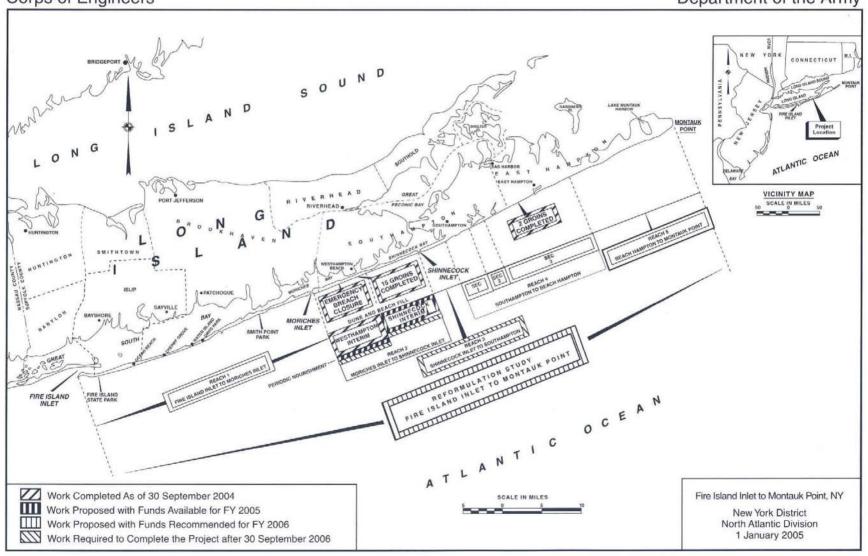
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$591,100,000 is the same as the latest estimate (\$591,100,000) presented to Congress (FY 2005).

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) was filed with the Environmental Protection Agency (USEPA) on 28 January 1978. On 7 March 1978, the Department of the Interior (DOI), supported by other agencies referred the EIS to the Council on Environmental Quality (CEQ) as unacceptable. Subsequent to the strong objections on the projects final environmental impact statement, meetings were held between September 1978 and January 1980 with DOI, USEPA, U.S. Department of Commerce, and NYSDEC. Two public scoping meetings were held in October 1979. Subsequently, the Federal agencies agreed to a basis for the reformulation of the Fire Island to Montauk Point project, including a general agreement on the studies necessary to answer the outstanding concerns. An environmental analysis was included in Supplement No. 2 to GDM No. 1 to determine environmentally acceptable measures of beach protection for the critically eroded areas at Westhampton Beach.

OTHER INFORMATION: Initial planning and construction funds were appropriated in FY 1963. The work remaining to be done is completion of construction of Reach 2-Moriches Inlet to Shinnecock Inlet, Reach 4-Southhampton to Beach Hampton, initiation of construction of Reach 1-Fire Island Inlet to Moriches Inlet, Reach 3-Shinnecock to Southhampton, and Reach 5-Beach Hampton to Montauk, as well as the completion of the reformulation effort. The Corps of Engineers concurred with the request by the State of New York to initially construct 11 groins (Reach 2), and 2 groins (Reach 4) with beach fill to be added as necessary but not sooner than 3 years after groin completion. In recognition of the critical condition of the beaches due to earlier storms, the Corps recommended to the State in June 1967 that the 3 year observation period be waived and that construction of urgent hurricane protection be resumed. The State concurred and requested that work be undertaken on additional groins, replacement of beach fill and dunes in Reach 2, as well as construction of groins, drainage structures and dune fill in Reach 4. Suffolk county, however, did not endorse the placement of beach and dune fills. Continuing negotiations during FY 1969 resulted in agreement on a plan for construction for certain groins, drainage structures, beach fill, and dunes to an interim height of 16 feet in Reaches 2 and 4. In December 1973, the State requested planning for Reach 2 (Section 1b), (Westhampton Beach) and Reach 4 (Georgica Pond), indicating that it would provide funds. Planning resumed and assurances were requested from the State in October 1974. However, strong opposition developed with Suffolk County and the county legislature refusing to provide support. Subsequently, erosion of the shoreline downdrift of the groin field at Westhampton Beach accelerated to the point where Dune Road, the only access to the homes in this area, was under water during normal high tide. In December 1992, two breaches occurred in the barrier island near Westhampton Beach, which were subsequently closed. An interim plan for the severely eroded Westhampton Beach area was prepared in June 1994, which provides for a lower level of protection than that provided in the original authorization. This interim plan has been designed such that it could be modified based on future recommendations in the to-be-completed Reformulation study. The USEPA and DOI agreed in concept to the interim plan, provided that a full environmental assessment and/or environmental impact study was completed, and the reformulation of the overall project was reinstated. The estimated cost of the reformulation effort is \$24 million. The reformulation study completion date is being determined, the planning engineering and design has been completed for an interim project to address the severely eroded shoreline west of Shinnecock Inlet. The initial construction contract for the West of Shinnecock Interim project was awarded in September 2004. An interim plan for Fire Island barrier island has been discontinued due to the lack of a non-federal sponsor and environmental concerns which will be addressed during the reformulation study. The cost of these interim studies is \$4 million. Additionally, a Breach Contingency Plan was approved in January 1996 to provide for rapid response to breaches along the islands while awaiting completion of the reformulation study. In 1984, a lawsuit was brought against Suffolk County, the State of New York and the United States of America, which claimed that the groinfield constructed in the early 1960's caused erosion and damage to downdrift properties. In October 1994, the Village of West Hampton Dunes intervened and a settlement agreement was reached between the plaintiffs and the county, state and Federal governments to provide for storm damage protection and the agreed upon monitoring as described in the Corps 1995 Decision Document, and include periodic nourishment for a period of 30 years

Division: North Atlantic District: New York Fire Island Inlet to Montauk Point, NY



APPROPRIATION TITLE: Construction, General – Storm Damage reduction

PROJECT: Virginia Beach, Virginia (Hurricane Protection) (Continuing)

LOCATION: The city of Virginia Beach is located on the eastern coast of Virginia bordered by the Atlantic Ocean on the east, Chesapeake Bay on the north, the cities of Norfolk and Chesapeake on the west, and North Carolina on the south.

DESCRIPTION: The plan of improvement includes construction of a vertical steel sheet-pile wall with concrete cap extending from Rudee Inlet to 58<sup>th</sup> Street, enhancement of the existing dune system between 58<sup>th</sup> Street and 89<sup>th</sup> Street, construction and periodic renourishment of a widened and raised beach berm between Rudee Inlet and 89<sup>th</sup> Street, a new boardwalk integrated with the vertical wall and placed over the existing boardwalk extending from Rudee Inlet to approximately 40<sup>th</sup> Street, a storm water runoff system consisting of the offshore discharge by pumped flow through submarine pipelines, appropriate beach access structures consisting of ramps and stairs and dune crossover facilities.

AUTHORIZATION: The project is authorized for construction by the Water Resources Development Act of 1986, as modified by the Water Resources Development Act of 1992 and 1996

REMAINING BENEFIT – REMAINING COST RATIO: 8.6 to 1 at 7 percent

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 percent

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in July 1994 at October 1993 price levels.

SUMMARIZED FINANCIAL DATA	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Initial Construction 86,780,000 Periodic Nourishment 160,220,000	247,000,000	Initial construction Periodic nourishment Entire Project	95 0 25	Sep 2006 To be determined To be determined
Estimated Non-Federal Cost Initial Construction 35,989,000 Cash Contributions 35,876,000 Other Costs 113,000  Periodic Nourishment 97,011,000 Cash Contributions 97,011,000 Other Costs 0  Total Estimated Project Cost Initial Construction 102,825,000 Periodic Nourishment 277,175,000	133,000,000	PHYSICAL DATA Approximately 20,600 LF of vertical sheet- pile seawall with concrete cap between Rudee Inlet and 58 <sup>th</sup> Street which will be integrated into a new boardwalk between Rudee Inlet and 40 <sup>th</sup> Street, enhanced dune system bet 58 <sup>th</sup> and 89 <sup>th</sup> Street at elevation 18 ft NGVD and 25 ft owidth, beach berm between Rudee Inlet and 89 <sup>th</sup> Street at elevation 9 ft NGVD and 100 ft crest width, pumped discharge drainage system. Periodic nourishment of beach berm between Rudee Inlet and89 <sup>th</sup> Street (6.2 m 50-year project life.		let and 58 <sup>th</sup> Street bardwalk between ed dune system between t NGVD and 25 ft crest Inlet and 89 <sup>th</sup> Street est width, pumped ocean c nourishment of
Allocations to 30 September 2004 Conference Allowance for 2005 Allocation for FY 2005 Allocations through FY 2005 Allocation Requested for FY 2006 Programmed Balance to Complete after FY 2006 Unprogrammed Balance to Complete after FY 2006	82,336,000 500,000 444,000 <u>1</u> / 82,780,000 4,000,000 0 164,216,000			

<sup>1/</sup> Reflects \$52,000 reduction assigned as savings and slippage and \$4,000 rescinded in accordance FY05 Omnibus Appropriation Act

Division: North Atlantic District: Norfolk Virginia Beach, VA (Hurricane Protection)

JUSTIFICATION: The major problem along the Virginia Beach coastline is the vulnerability of portions of the beach and adjacent development to direct wave attacks during major storms and hurricanes. The most severe hurricane to affect the Virginia Beach area was that of August 1933 where tidal heights reached approximately 9 ft NGVD. In March 1962, a severe northeastern storm caused breaching and failing of bulkheads and dunes, and severe erosion along the beachfront resulting in damages of approximately \$9,000,000 (March 1962 price level) to the Virginia Beach area. Although the 1933 hurricane was of greater magnitude, the damaging effect of the 1962 northeaster was the greatest of any storm in the area due to the increased development along the shoreline between 1933 and 1962 and the duration of the storm over several high tides. Without a storm protection damage reduction project, damages to commercial, residential and public developments and to existing protective works along the Atlantic Ocean between Rudee Inlet and 89<sup>th</sup> Street are estimated at \$106 million at 1993 price levels for a repeat of the August 1933 hurricane and \$64 million for a repeat of the March 1962 storm. The average annual benefits amount to \$13,853,000 for storm damage reduction based on October 1993 price levels.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Environmental Monitoring	200,000
Construction of 79 <sup>th</sup> Street Interceptor	3,800,000
TOTAL	4,000,000

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

Annual Operation, Maintenance,

Payments Repair,
During Rehabilitation,
Construction and

and Replacement

Requirements of Local Cooperation Reimbursements Costs

Provide lands, easements, rights of way, and

borrow and excavated or dredged material disposal areas. 113,000

Pay 35 percent of the costs allocated to hurricane and storm damage reduction, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hurricane and storm damage reduction facilities.

reduction facilities. 35,876,000 1,528,000

Pay 35 percent of the cost of periodic nourishment. 97,011,000

Total Non-Federal Costs 133,000,000 1,528,000

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

Division: North Atlantic District: Norfolk Virginia Beach, VA (Hurricane Protection)

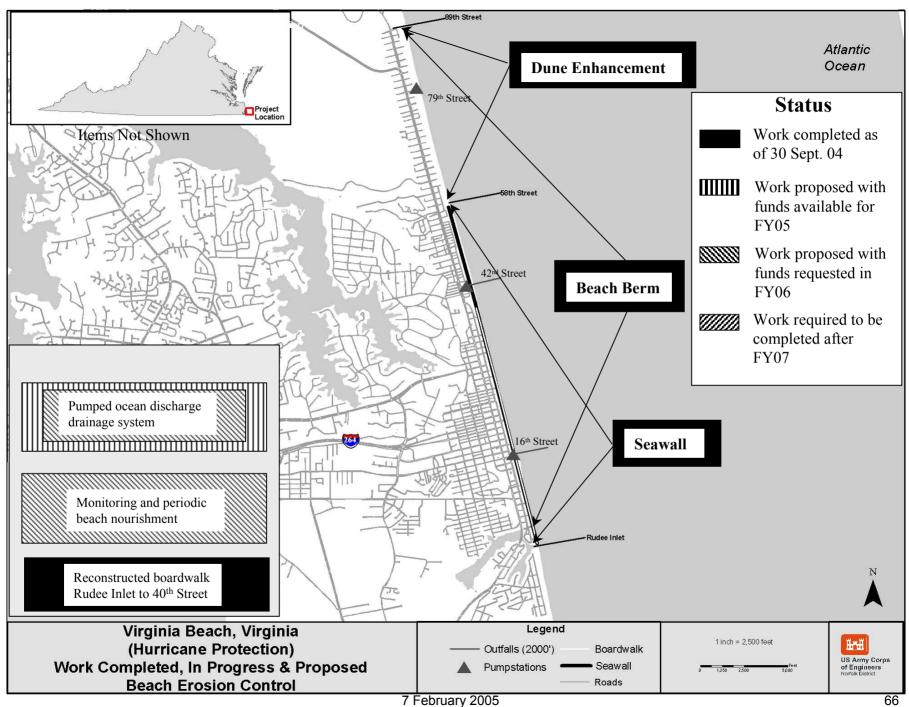
7 February 2005

STATUS OF LOCAL COOPERATION: The city of Virginia Beach, Virginia is the local sponsor. The city has indicated their support for the recommended project and signed the PCA on 27 June 1996.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$247,000,000 is the same as the latest estimate (\$247,000,000) presented to Congress (FY 2004).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement (FEIS) was filed with the Presidents Council on Environmental Quality (CEQ) on 19 September 1972 and a supplement was issued on 22 February 1985. An Environmental Assessment was completed and a Finding of No Significant Impact (FONSI) was signed in May 1994.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986. Funds to initiate construction funds were appropriated in the FY 1996. FY 2006 monitoring funds will be used to accomplish state-mandated regulatory turtle monitoring. The budget funds the initial construction phase of beach nourishment projects that reduce storm damages, but does not support follow-up work for such projects, except in those cases where the operation and maintenance of Federal navigation projects contributed to the erosion of the shoreline.



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Wyoming Valley, Pennsylvania (Levee Raising) (Continuing)

LOCATION: Wyoming Valley is located in northeastern Pennsylvania and extends from Duryea on the Lackawanna River southwestward to Nanticoke on the Susquehanna River. The Wyoming Valley flood control projects are located on the Susquehanna River in Luzerne County and are the four contiguous existing Federal flood control projects at Plymouth, Kingston-Edwardsville, Swoyersville-Forty Fort, and Wilkes-Barre and Hanover Township, which together function as a flood control system within the Valley.

DESCRIPTION: The four existing Federal flood control projects in the Wyoming Valley were designed to protect against a flood equal to the March 1936 event which had a peak flow of 232,000 cubic feet per second. Modifications to the existing project would protect against flood flows of 318,500 cubic feet per second that would be caused by a recurrence of Storm Agnes. The proposed modifications include raising existing levees and floodwalls between 3 and 5 feet, modifying closure structures, relocating utilities, and providing some new floodwalls and levees to maintain the integrity of the flood control system. The proposed project also includes a plan to reduce project-related adverse impacts. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and the Water Resources Development of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: 10.4 to 1 at 7 percent.

TOTAL BENEFIT - COST RATIO: 2.1 to 1 at 7 percent.

INITIAL BENEFIT - COST RATIO: 2.7 to 1 at 7 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

SUMMARIZED FINANCIAL DATA		ACCUM. PCT. OF EST FED COST	STATUS	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
_ ,, , , _ , , _ ,			(1 Jan 2005)		
Estimated Federal Cost	\$131,000,000				
Estimated Non-Federal Cost:	44,000,000		Levee Raising	100	Jan 2003 <u>1</u> /
Cash Contributions \$33,538,000			Entire Project	80	To be determined
Other Costs 10.462.000			•		
Total Estimated Project Cost	\$175,000,000				

1/ See Other Information.

Division: North Atlantic District: Baltimore Wyoming Valley, PA (Levee Raising)

7 February 2005

SUMMARIZED FINANCIAL DATA:(CONT'D)

Allocations to 30 September 2004 101,846,000 Conference Allowance for FY 2005 7,300,000 Allocation for FY 2005 6,486,000 <u>1</u>/ Allocations through FY 2005 108,332,000 Allocation Requested for FY 2006 10,496,000 Programmed Balance to after FY 2006 12,172,000 Unprogrammed Balance to Complete after FY 2006 0

1/ Reflects \$762,000 reduction assigned as savings and slippage, \$52,000 rescinded in accordance with FY 05 Omnibus Appropriations Act.

# PHYSICAL DATA

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		PHYSICAL DATA		
Swoyersville-I	Forty Fort	Plymouth		
Completed Work	Raising Work	Completed Work	Raising Work	
	-			
<u>Levees</u> - Earthfill:	<u>Levees</u> - Earthfill:	Levees - Earthfill: 8,700 ft.	<u>Levees</u> - 8,600 ft. x 2-4 ft.	
16,970 ft.	16,500 ft. x 3-5 ft.	<u>Channel</u> - 2,670 ft.	Floodwall - Concrete:	
Floodwall - Steel	Floodwall - Steel sheetpile:	Pump Stations – 2	200 ft. x 2-4 ft.	
sheetpile: 2,490 ft.	4,000 ft. x 3-5 ft.		Steel sheetpile:	
Channel - 3,900 ft.			200 ft. x 2-4 ft.	
			Earth: 500 ft. x 2-4 ft.	
			Pump Station Modification- 2	
Kingston-Edwardsville		Wilkes-Barre and Hanover Township		
Kingston-Edw	vardsville	Wilkes-Barre and Hanove	er Township	
Kingston-Edw Completed Work	vardsville Raising Work	Wilkes-Barre and Hanove Completed Work	er Township Raising Work	
Completed Work	Raising Work	Completed Work	Raising Work	
Completed Work  Levees - Earthfill:	Raising Work <u>Levees</u> - Earthfill:	Completed Work  Levees - Earthfill: 27,860 ft.	Raising Work  Levees - Earthfill: 20,600 ft.	
Completed Work  Levees - Earthfill: 18,430 ft	Raising Work <u>Levees</u> - Earthfill:  17,300 ft. x 3-5 ft.	Completed Work  Levees - Earthfill: 27,860 ft.  Floodwall - Concrete: 160 ft.	Raising Work	
Completed Work  Levees - Earthfill: 18,430 ft Conduit - 16.5 ft. x	Raising Work  Levees - Earthfill: 17,300 ft. x 3-5 ft. Floodwall - Concrete: 500 f.	Completed Work  Levees - Earthfill: 27,860 ft.	Raising Work  Levees - Earthfill: 20,600 ft. x 3-5 ft. Floodwall - Concrete: 500 ft.	
Completed Work  Levees - Earthfill: 18,430 ft	Raising Work <u>Levees</u> - Earthfill:  17,300 ft. x 3-5 ft.	Completed Work  Levees - Earthfill: 27,860 ft.  Floodwall - Concrete: 160 ft.	Raising Work  Levees - Earthfill: 20,600 ft. x 3-5 ft. Floodwall - Concrete: 500 ft. x 3-5 ft. Sheetpile 4,300 ft.	
Completed Work  Levees - Earthfill: 18,430 ft . Conduit - 16.5 ft. x 6,660 ft. Channel - 3,640 ft.	Raising Work  Levees - Earthfill: 17,300 ft. x 3-5 ft. Floodwall - Concrete: 500 f.	Completed Work  Levees - Earthfill: 27,860 ft. Floodwall - Concrete: 160 ft. Pump Stations - 5 stormwater	Raising Work  Levees - Earthfill: 20,600 ft. x 3-5 ft. Floodwall - Concrete: 500 ft.	
Completed Work  Levees - Earthfill: 18,430 ft . Conduit - 16.5 ft. x 6,660 ft.	Raising Work  Levees - Earthfill: 17,300 ft. x 3-5 ft. Floodwall - Concrete: 500 f. x 3-5 ft. Earth: 500 ft. x 3-5 ft. Closures - 3 new	Completed Work  Levees - Earthfill: 27,860 ft. Floodwall - Concrete: 160 ft. Pump Stations - 5 stormwater 8 sanitary	Raising Work  Levees - Earthfill: 20,600 ft. x 3-5 ft. Floodwall - Concrete: 500 ft. x 3-5 ft. Sheetpile 4,300 ft. x 3-5 ft. Earth: 600 ft. x 3-5 ft.	
Completed Work  Levees - Earthfill: 18,430 ft . Conduit - 16.5 ft. x 6,660 ft. Channel - 3,640 ft.	Raising Work  Levees - Earthfill: 17,300 ft. x 3-5 ft. Floodwall - Concrete: 500 f. x 3-5 ft. Earth: 500 ft. x 3-5 ft.	Completed Work  Levees - Earthfill: 27,860 ft. Floodwall - Concrete: 160 ft. Pump Stations - 5 stormwater 8 sanitary	Raising Work  Levees - Earthfill: 20,600 ft. x 3-5 ft. Floodwall - Concrete: 500 ft. x 3-5 ft. Sheetpile 4,300 ft. x 3-5 ft. Earth: 600 ft.	

Division: North Atlantic District: Baltimore Wyoming Valley, PA (Levee Raising)

JUSTIFICATION: The four existing local protection projects which comprise the Wyoming Valley system were constructed between 1935 and 1976 and provide protection for an area of 5,160 acres and a population of 225,000. Over the past 200 years at least 32 floods have been recorded which exceeded a stage of 25 feet at Wilkes-Barre compared to the flood stage of 22 feet. The discharge of 345,000 cubic feet per second during June 1972 (Storm Agnes) without the now completed Cowanesque and Tioga-Hammond Lakes projects in operation overtopped the protection and resulted in the greatest flood of record with damages of \$730,000,000. A recurrence of Storm Agnes would result in damages to about 25,000 structures with an estimated value of about \$4 billion (October 1997 price level). In January 1996, a combination of rainfall and snowmelt resulted in a flood stage of about 34 feet at Wilkes-Barre, PA. Although the existing system prevented flood damages of nearly \$500 million, residual damages were estimated at about \$6 million in the Wyoming Valley area. The average annual benefits amount to \$27,143,000 essentially all for flood control, based on the final Phase II General Design Memorandum approved February 1996 at January 1993 price levels.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Continue Modifications to Swoyersville Forty-Fort and	
Outfalls and pentrations throughout levee system	3,100,000
Continue Non-Structural Measures	4,900,000
Planning, Engineering and Design	1,596,000
Construction Management	900,000
Total	\$10,496,000

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, and Replacement Costs
Provide lands, easements, and rights of way.	4,272,000	
Modify or relocate, utilities, roads, bridges (except railroad bridges) and other facilities where necessary in the construction of the project.	6,190,000	
Pay 18 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operation, maintenance and replacement of flood control facilities.	31,735,000	175,000
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	1,803,000	39,000
Total Non-Federal Costs	\$44,000,000	\$214,000

STATUS OF LOCAL COOPERATION: The non-Federal sponsor is the Luzerne County Flood Protection Authority. The Pennsylvania Department of Environmental Protection has committed to provide 45 percent of the non-Federal share of project costs. Letters of intent to provide the required local cooperation requirements were furnished by Luzerne County (19 January 1995) and the Commonwealth of Pennsylvania (30 December 1994). A Project Cooperation Agreement was executed in October 1996. To date, the Authority has fully complied with the local requirements on the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$131,000,000 is the same as the latest estimate (\$131,000,000) presented to Congress (FY 2005).

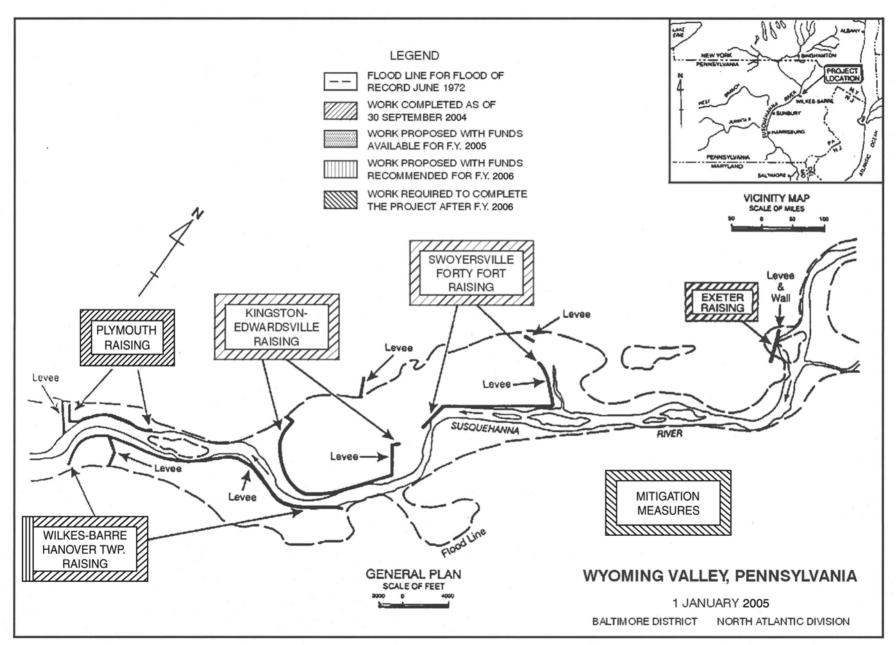
STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Supplemental Environmental Impact Statement is included in the final General Design Memorandum approved February 1996. The Record of Decision was signed 24 June 1996.

Division: North Atlantic District: Baltimore 7 February 2005

Wyoming Valley, PA (Levee Raising)

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1984, and funds to initiate construction were appropriated in FY 1995. The Wyoming Valley levee raising effort was completed except for the upstream tie out (eight-tenths of mile) of the Wilkes-Barre Hanover levee, which protects the largest damage center for the system. In an effort to be able to provide Agnes Level protection for this critical reach while also showing flexibility for the resolution of the outstanding design details for this reach, sheet pile was driven. This sheet pile does provide Agnes level protection for the time being; however, it is not constructed to withstand a standard Corps of Engineers 50 year life without the necessary drainage structure, backfill and other support features that are designed to be included in the Wilkes-Barre Phase 2c construction contract. Because of the need for these support features, the existing protection has risks and uncertainty beyond a level that would allow the Baltimore District to claim damage benefits. This is why we are able to both claim that we have Agnes level protection, but also not claim the benefits.

Division: North Atlantic District: Baltimore 7 February 2005



APPROPRIATION TITLE: Construction, General – Dam Safety

PROJECT: Jennings Randolph Lake, MD & WV (Continuing)

LOCATION: Jennings Randolph Lake is located on the North Branch Potomac River on the state line between Garrett County, Maryland, and Mineral County, West Virginia. The dam site is located approximately 8 river miles upstream from the confluence with the Savage River at Bloomington, Maryland, and approximately 1.3 miles upstream from Barnum, West Virginia.

DESCRIPTION: The existing project, which was formerly known as Bloomington Lake, was completed in 1981. The dam is rolled earth and rockfill structure with an impervious core rising 296 feet from the streambed and extending 2,130 feet across the valley. The dam includes a dike 900 feet long on the left (north) bank, and a spillway with tainter gates along the ridge between the dike and the dam. Outlet works are provided in the right (south) abutment. The project provides low flow augmentation, water quality control, flood control, water supply, and recreation. With a full conservation pool, the lake, controlling a drainage area of 263 square miles, is about 5.5 miles long and has a surface area of 952 acres. Of the 130,900 acre-feet of storage available, 36,200 acre-feet is allotted to flood control; 51,005 acre-feet is water quality storage that is primarily used for augmenting low river flows for acid mine drainage abatement; 40,995 acre-feet is contracted water supply storage for the metropolitan Washington, D.C. area; and 2,700 acre-feet is dead storage. In order to meet current dam safety criteria, a project modification will be undertaken to allow the project to adequately pass the probable maximum flood (a rare but potential event that is used as design criteria to ensure that a dam will not be overtopped). Based on analyses performed in 2002-03, a fuse plug spillway, in the left abutment between the gated spillway and saddle dike, in possible combination with a minor (less than 3 feet) dam raising was identified as the recommended alternative.

AUTHORIZATION: Section 1203 of the Water Resources Development Act of 1986

REMAINING BENEFIT - REMAINING COST RATIO: 14.0 to 1 at 7 percent

TOTAL BENEFIT - COST RATIO: 14.0 to 1 at 7 percent

INITIAL BENEFIT-COST RATIO: 14.0 to 1 at 7 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are based on the economic analysis contained in the Dam Safety Assurance Program Evaluation Report, Jennings Randolph Lake, Maryland and West Virginia, dated May 2003, at October 2002 price levels.

SUMMARIZED FINANCIAL D	)ATA	ACCUM. PCT. OF EST. FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost: Cash Contributions \$1,100,000	\$22,500,000 1,100,000		Entire Project	0	To be determined
Other Costs 0 Total Estimated Project Cost	\$23,600,000				

Division: North Atlantic District: Baltimore Jennings Randolph Lake, MD & WV 7 February 2005

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#### SUMMARIZED FINANCIAL DATA: (continued)

Allocations to 30 September 2004	410,000		
Conference Allowance for FY 2005	640,000		
Allocation for FY 2005	568,000	<u>1</u> /	
Allocations through FY 2005	978,000		4
Allocation Requested for FY 2006	400,000		6
Programmed Balance to Complete			
after FY 2006	21,122,000		
Unprogrammed Balance to Complete			
after FY 2006	0		

PHYSICAL DATA
- Fuse plug spillway in left abutment

1/ Reflects \$67,000 reduction assigned as savings and slippage, \$5,000 rescinded in accordance with FY 05 Omnibus Appropriations Act.

JUSTIFICATION: The Corps of Engineers completed construction of Jennings Randolph Dam in 1981, under the authority of the Flood Control Act of 1962. In the 1990's, the Corps initiated a water reallocation study for Jennings Randolph Lake. During this study it was discovered that the reservoir's spillway capacity is insufficient to handle the revised probable maximum flood (PMF) based on current Corps of Engineers dam safety criteria. While the project as originally designed met all dam safety criteria applicable at the time, recent changes to rainfall criteria have resulted in a revised, larger PMF. As a result, the Corps halted its reallocation study effort and initiated a separate spillway evaluation study for Jennings Randolph Lake under the Dam Safety Assurance Program established by Section 1203 of WRDA 1986. Subsequently, analyses were undertaken to establish the existing spillway capacity and to identify potential alternatives to bring the project back into compliance with current dam safety criteria. Based on these analyses, it was determined that the addition of a fuse plug spillway in possible combination with a minor (less than 3 feet) dam raising could accomplish this objective.

Since the project was constructed in 1981, the dam has prevented flood damages in excess of \$456 million (Oct 02 price levels). This equates to \$22 million in annual flood control benefits over the 21 years of operation. In the authorization study, Jennings Randolph Lake, was projected to produce annual flood control benefits of \$3.6 million, so the project has far exceeded expectations. In addition, the project is estimated to contribute over \$19 million annually in water quality, water supply, and recreation benefits (Oct 02 price levels).

FISCAL YEAR 2006: The requested amount will be applied as follows:

Planning, Engineering & Design 400,000

Division: North Atlantic District: Baltimore

District: Baltimore Jennings Randolph Lake, MD & WV
7 February 2005

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Acts of 1986 and 1996, the Non-Federal sponsor must comply with the requirements listed below:

	Payments During Construction and Reimbursements	Annual Operation, Maintenance and Replacement Costs	
Requirements of Local Cooperation		000.0	
Provide lands, easements, rights of ways	\$ 0		
Pay 15 percent of the modification costs in accordance With the cost allocation in effect at the time of construction	\$1,100,000	0	
Total Non-Federal Costs	\$1,100,000	0	

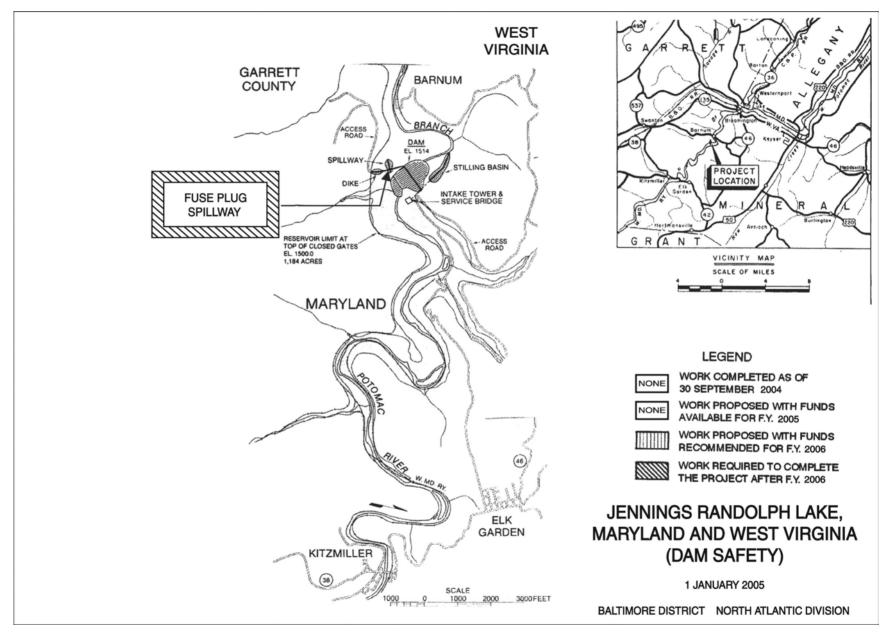
STATUS OF LOCAL COOPERATION: In 1970 and 1982, the Washington area water supply utilities executed water supply agreements to purchase 33.2 percent of the Jennings Randolph Lake storage. Based on the Section 1203 cost-sharing requirements, the water supply users will be required to pay a portion of 15 percent of the design and construction costs for the dam safety project modification, with the Federal government funding the remainder. This portion is determined by the current storage allocation. Subsequently, the total non-Federal share is 4.98 percent of the project modification costs (33.2 percent of 15 percent). The non-Federal share will be recouped during or after construction in one of three ways: (1) incrementally during construction, (2) in lump sum upon completion of construction, or (3) following construction completion, in annual payments with interest. The water supply utilities have been informed of the project modification results, and will select the payment method during the final design phase. No amendment to the water supply agreement will be required. All additional operation and maintenance costs will be subsumed under the current water supply agreement.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$22,500,000 is the same as the latest estimate (\$22,500,000) presented to Congress (FY 2005).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A record of environmental consideration was approved in June 2002 and determined that the project will not have significant impacts.

OTHER INFORMATION: Preconstruction Engineering and Design efforts were initiated in FY 2004 using Dam Safety Seepage and Stability Correction Program funds.

Division: North Atlantic District: Baltimore 7 February 2005



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APPROPRIATION TITLE: Construction, General – Dam Safety Assurance – Flood Control

PROJECT: Otter Brook Dam, New Hampshire (Continuing)

LOCATION: Otter Brook Dam is located within the Ashuelot River Watershed in the town of Keene in southern New Hampshire. The dam site is located along Otter Brook about 2.4 miles above its confluence with the Branch River and about 4.9 miles above the confluence of the Branch and Ashuelot Rivers.

DESCRIPTION: Otter Brook Dam was constructed in 1958 as a single-purpose flood control project. The main dam is composed of an earth filled embankment with rock slope protection, 1,288 feet in length, with a maximum height of 133 feet above the riverbed. Storage capacity of the reservoir is 17,600 acre-feet at spillway crest. The dam includes an uncontrolled concrete overflow spillway, 145 feet in length, through a rock cut in the west abutment. The project has prevented \$28.7 million in damages to date. Proposed dam safety modifications involve the construction of a new concrete weir using fuseplugs designed to fail prior to exceeding discharge capacity. The failure of the fuseplugs would lower the spillway crest elevation, increasing spillway capacity sufficiently to discharge the probable maximum flood.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT-REMAINING COST RATIO: The remaining benefit-remaining cost ratio is 7.1 to 1 at 7 percent.

TOTAL BENEFIT-COST RATIO: The total benefit-cost ratio is 2.2 to 1 at 7 percent.

INITIAL BENEFIT-COST RATIO: The initial benefit-cost ratio is 2.4 to 1 at 7 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are based on the economic analysis contained in the Dam Safety Assurance Program Evaluation Report, Otter Brook Dam, New Hampshire, dated May 2003, and limited reevaluation to June 2004 price levels.

SUMMARIZED FINANCIAL DATA		ACCUMULATED PCT. OF EST. FED COST	STATUS (1 Jan 2005)	PERCENT COMPLETE	PHYSICAL COMPLETION SCHEDULE
Estimated Federal Cost Estimated Non-Federal Cost	\$4,495,000 0		Entire Project	0	Sep 2006
Total Estimated Project Cost	\$4,495,000				

Division: North Atlantic District: New England Otter Brook Dam, MA

7 February 2005

ACCUMULATED PCT. OF EST. FED COST

SUMMARIZED FINANCIAL DATA (Continued)

Allocations to 30 September 2004 Conference Allowance for FY 2005	\$ 400,000 3,000,000		Construct new concrete spillway, 145 feet in length, with fuseplugs designed to fail prior to exceeding discharge capacity.
Allocation for FY 2005	2,665,000 <u>1</u> /		
Allocations through FY 2005	3,065,000	68	
Allocation Requested for FY 2006	\$ 1,430,000	100	
Programmed Balance to Complete			
After FY 2006	0		
Unprogrammed Balance to Complete			
After FY 2006	0		

<sup>1/</sup> Reflects reductions of \$313,000 for savings and slippage and \$22,000 rescinded in accordance with FY 05 Omnibus Appropriations Act.

JUSTIFICATION: Otter Brook Dam has performed satisfactorily since placed in operation in 1958. The project is in good overall condition, with the only significant dam safety problem being the spillway cannot pass the design flood as computed under current hydrologic criteria. During a hydrologic event in the magnitude of the revised spillway design flood, inflow at Otter Brook Lake would exceed spillway capacity, overtopping the dam by one foot and jeopardizing the embankment structure. Catastrophic failure of the dam during the spillway design flood would cause an estimated \$92 million in property damage and place nearly 14,000 people at risk in the densely populated City of Keene and other downstream communities. Construction of a new spillway at Otter Brook Dam will greatly enhance the protection of life and property in the Ashuelot and Connecticut River Basins, require minimal additional operations and maintenance efforts and have no net impact on the local environment. Average annual benefits for dam safety modifications are \$709,000 at June 2004 prices, of which \$555,600 is for flood control and \$153,400 for recreation.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Complete Construction	\$1,200,000
Engineering and Design	70,000
Construction Management	160,000

Total \$1,430,000

NON-FEDERAL COSTS: None Required.

Division: North Atlantic District: New England Otter Brook Dam, MA

7 February 2005

PHYSICAL DATA

STATUS OF LOCAL COOPERATION: None Required.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$4,495,000 is a decrease of \$55,000 from the latest estimate (\$4,550,000) presented to Congress (FY 2005). This change includes the following items:

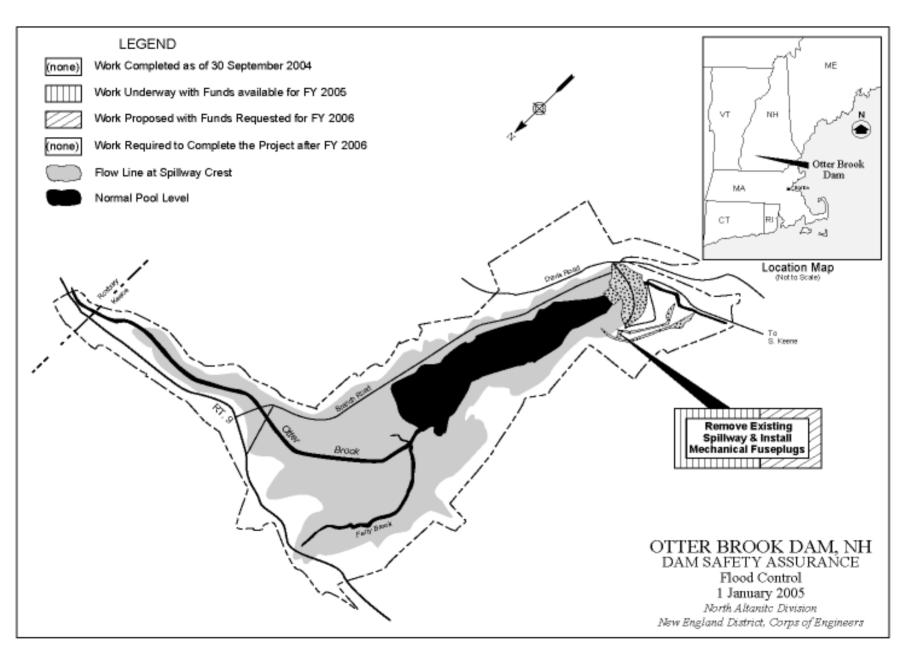
ITEM	AMOUNT
Other Estimating Adjustments	\$ -55,000
TOTAL	\$ -55,000

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and Finding of No Significant Impact were completed in April 2003. Work on the dam is restricted to the period between 15 June and 15 March to protect wetland species.

OTHER INFORMATION: Preconstruction Engineering and Design (PED) efforts were initiated in FY 2004 using Dam Safety Seepage and Stability Correction Program funds. Fiscal Year 2005 Construction, General funds will be used to initiate construction.

Division: North Atlantic District: New England Otter Brook Dam, MA

**7 February 2005** 



APPROPRIATION TITLE: Construction, General – Dam Safety Assurance Program

PROJECT: Prompton Lake, PA

LOCATION: Prompton Dam is located one half mile upstream of the Village of Prompton, PA on the West Branch Lackawaxen River. The project is 31 miles upstream of the Lackawaxen River's confluence with the Delaware River at Lackawaxen, PA.

DESCRIPTION: The selected plan widens the spillway from 50.0' to 130.0'; raises the dam by placing the 7.0' retaining wall on top of the existing embankment; and incorporates a 5.0' high erodible spillway embankment on top of a 5.0' lowering of the existing spillway crest. The erodible spillway embankment would maintain the flood control storage provided by the existing project. Under extreme flood events, the 5.0' embankment would be overtopped and eroded down to the permanent spillway crest, thereby increasing spillway flow capacity to safely pass without danger of the dam being overtopped. This plan also includes a realignment of the existing access road requiring a new bridge over the spillway.

AUTHORIZATION: HD 113, 80<sup>th</sup> Cong., 1<sup>st</sup> Sess; HD 522, 887<sup>th</sup> Cong., 2<sup>nd</sup> Sess

REMAINING BENEFIT-REMAINING COST RATIO: N/A

TOTAL BENEFIT-COST RATIO: N/A

BASIS OF BENEFIT-COST RATIO: N/A

SUMMARIZED FINANCIAL DATA:	STATUS:	PERCENT
	(4 lan 2005)	COMPLETE

		(1 Jan 2005)	COMPLETE	SCHEDULE
Estimated Federal Cost	\$25,600,000	Entire Project	0	To be determined
Cationated Nam Cadenal Casta	Φ 0	-		

Estimated Non-Federal Costs \$ 0
Total Estimated Project Cost \$25,600,000 PHYSICAL DATA:

Widen Spillway from 50' to 130'; construct 7' retaining wall on top of embankment; Install 5' erodable fuse plug in new spillway;, realign existing access road;, build new

Operations building and a new access bridge over the spillway ACCUM.

PCT. OF EST. FED COST

Allocations to 30 September 2004 \$ 0

Conference Allowance for FY 2005 \$ 0

Allocation for FY 2005 \$ 800,000

Allocations through FY 2005 \$ 800,000 3

Allocation Requested for FY 2006 \$ 8,480,000 36

Programmed Balance to Complete after FY 2006 \$ 16,320,000

Programmed Balance to Complete after FY 2006 \$16,320,000 Unprogrammed Balance to Complete after FY 2006 0

Division: North Atlantic District: Philadelphia Prompton Lake, PA

7 February 2005

PHYSICAL COMPLETION

JUSTIFICATION: Since construction of Prompton Dam in 1960, the criteria and data for determining the Probable Maximum Flood (PMF) have been revised. The current estimated PMF would result in a significantly higher inflow than that for which the existing project was designed. The maximum flood that can be passed by Prompton Dam with the appropriate freeboard was determined to be only 68% of the current PMF. A Dam Safety Assurance Reconnaissance Report determined that the dam is hydrologically deficient and modification of the dam is required. Beginning at the dam and continuing downstream 31 miles to the confluence of the Lackawaxen and Delaware Rivers, lie the communities of Prompton, Honesdale, Hawley, Texas, Palmyra and Lackawaxen. The total combined population is approximately 14,300 permanent residents. Approximately one-third of all residents would be at risk if the existing dam were to fail. All major access routes out of the flood plan would be impassable, thus making evacuation questionable.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Initiate Construction:	\$ 7,520,000
Engineering & Design	\$ 160,000
Construction Management	\$ 800,000
Total	\$ 8,480,000

NON-FEDERAL COST: N/A. Non-Federal cost sharing not applicable because original project was constructed at full Federal expense.

STATUS OF LOCAL COOPERATION: N/A. Entire project is located within existing Federal project. There are no items of local cooperation required.

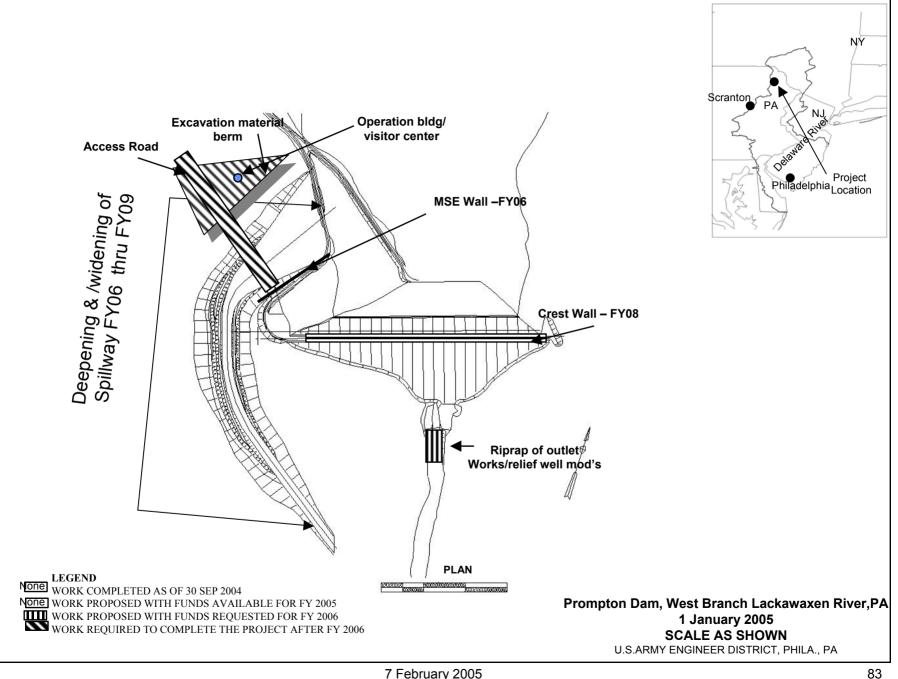
COMPARISON OF FEDERAL COST ESTIMATE: The current Federal cost estimate of \$25,600,000 is the initial estimate being presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Environmental Assessment (FONSI) is scheduled for September 2005.

OTHER INFORMATION: Hydrologic Deficiency report was approved May 1995 by ASA(CW). A Design Documentation Report was completed June 2004.

Division: North Atlantic District: Philadelphia Prompton Lake, PA

**7 February 2005** 



APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Poplar Island, Maryland (Continuing)

LOCATION: Poplar Island is a group of islands located in the upper middle Chesapeake Bay approximately 34 nautical miles southeast of the Port of Baltimore.

DESCRIPTION: The project consists of reconstructing Poplar Island to its approximate size in 1847 (1,140 acres), using an estimated 40 million cubic yards of uncontaminated dredged material from maintenance dredging of the southern approach channels of the Baltimore Harbor and Channels navigation project. This will be accomplished through the construction of approximately 35,000 feet of armored dikes to contain the dredged material necessary to form the low and high marsh wetlands and upland habitat and to protect the 1,140-acre dredged material placement area from the severe wave activity in this region of the Chesapeake Bay.

AUTHORIZATION: Water Resources Development Acts of 1996 and 2000.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT-COST RATIO: Not applicable.

INITIAL BENEFIT-COST RATIO: Not applicable.

BASIS OF BENEFIT-COST RATIO: Not applicable.

	ACCUM			PHYSICAL
	PCT. OF EST.		PERCENT	COMPLETION
SUMMARIZED FINANCIAL DATA	FED COST	STATUS	COMPLETE	SCHEDULE
		(1 Jan 2005)		

**Entire Project** 

Estimated Federal Cost 254,000,000 Estimated Non-Federal Cost: 84,000,000

Cash Contributions 45,963,000 Other Costs 38,037,000

Total Estimated Project Cost 338,000,000

Division: North Atlantic District: Baltimore Poplar Island, Maryland

7 February 2005

55

To be determined

#### SUMMARIZED FINANCIAL DATA:(CONT'D)

#### PHYSICAL DATA

Allocations to 30 September 2004 Conference Allowance for FY 2005 Allocation for FY 2005 Allocations through FY 2005	125,764,000 15,130,000 13,441,000 139,205,000	<u>1/</u>	55	Earth and rock dikes Wetlands created Uplands created	35,000 feet 570 acres 570 acres
Allocation Requested for FY 2006 Programmed Balance to Complete after FY 2006	13,400,000		60		
Unprogrammed balance to Complete after FY 2006	0				

<sup>1/2</sup> Reflects \$1,580,000 reduction assigned as savings and slippage, \$109,000 rescinded in accordance with the FY 05 Omnibus Appropriation Act.

JUSTIFICATION: Valuable island habitat at Poplar Island is being lost through erosion. Islands are preferentially selected by many fish and wildlife species as nesting/production areas. The lack of human disturbance and fewer predators make islands more productive. Poplar Island is currently eroding at more than 13 feet per year and would have disappeared by now without the project. The plan to restore the island using uncontaminated dredged material from maintenance dredging of the Baltimore Harbor and Channels navigation project was developed through the cooperative efforts of many state and Federal agencies, as well as private organizations. The Port of Baltimore is rapidly reaching a point where available placement area capacity will be insufficient to meet the port's dredging needs. A disruption in the constant maintenance that is required to keep the Port of Baltimore operational would result in significant adverse effects to both the local and national economy.

FISCAL YEAR 2006: The requested amount will be applied as follows:

Dredging	\$ 7,176,000
Planning, Engineering, and Design	1,827,000
Construction Management	543,000
Dike and Infrastructure	<u>3,854,000</u>
Total	\$13,400,000

Division: North Atlantic District: Baltimore Poplar Island, Maryland

**7 February 2005** 

NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal Annual

sponsor must comply with the requirements listed below:

Payments During Construction Operation Maintenance

and

and

Replacement Costs

Reimbursements

Provide lands, easements, and rights-of-way

Requirements of Local Cooperation

Pay 25 percent of the cost allocated to fish & wildlife restoration (including \$38,000,000 in credits for in-kind services and materials) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of fish and wildlife facilities.

\$ 37,000 83.963.000

440.000

Total Non-Federal Costs \$84,000,000 440,000

STATUS OF LOCAL COOPERATION: The State of Maryland is the non-Federal sponsor. By letter dated 16 May 1996, the State of Maryland stated its intent to be the non-Federal sponsor and participate in project cost sharing in accordance with the Water Resources Development Act of 1986. The Project Cooperation Agreement was executed in April 1997 and amended 9 April 2002 to reflect in-kind services authorized by the Water Resources Development Act of 2000. To date, the State has fully complied with the local requirements on the project.

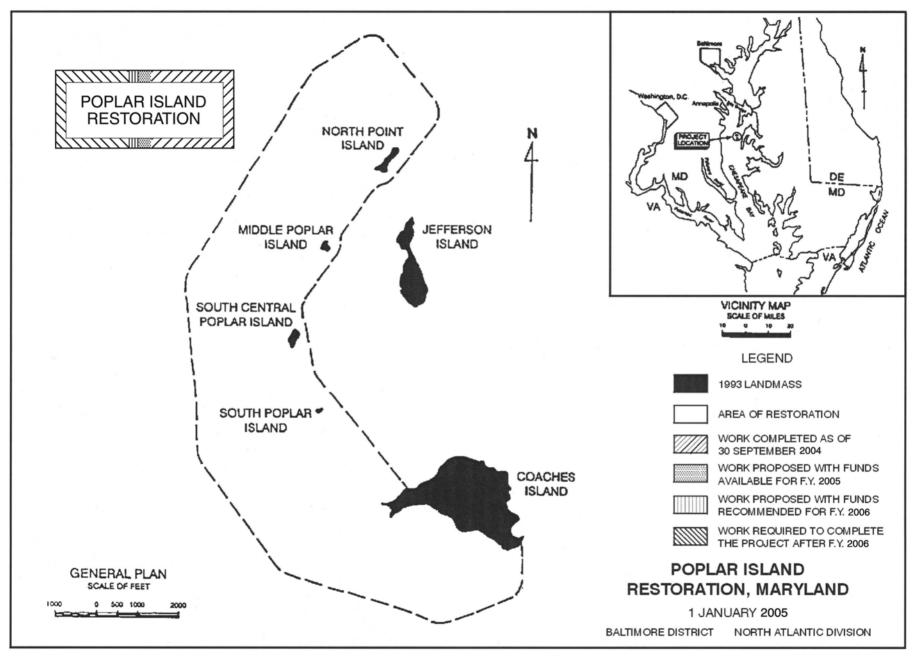
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$254,000,000 is the same as the latest estimate (\$254,000,000) presented to Congress (FY 2005).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The EIS was distributed for review and was finalized in February 1996 under the authority of Section 204 of the Water Resources Development Act of 1992.

OTHER INFORMATION: Planning for this project was accomplished under the authority of Section 204 of the Water Resources Development Act of 1992. The feasibility study was initiated in September 1994, completed in February 1996, and approved by the Assistant Secretary of the Army for Civil Works in September 1996. Funds to initiate construction were appropriated in FY 1997.

Division: North Atlantic District: Baltimore Poplar Island, Maryland

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7 February 2005

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2006

#### 1. Navigation

#### a. Channels and Harbors

The budget estimate of \$ 114,446,000 provides for essential operation and maintenance work on 50 channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and dredged material disposal areas, facilities protection, snagging and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

STATE	ESTIMATED OF	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2005 (\$)	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-)
			Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
		Delaware	
IWW, from Delaware River to Chesapeake Bay, DE & MD	12,223,000	11,475,000	Dredge navigation channel and annual maintenance of navigation facilities.
Mispillion River	0	20,000	None.
Murderkill River	0	20,000	None.
Wilmington Harbor	3,338,000	3,860,000	Dredge navigation channel; maintain disposal site.
		District of Columbia	a
Washington Harbor	0	600,000	Repair tidal gates.

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

#### 1. Navigation (Cont'd)

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2005 (\$)</u> <u>Total</u>	<u>FY 2006 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
		Maine	
Bass Harbor	0	95,000	None.
Carvers Harbor	0	270,000	None.
Portland Harbor	0	520,000	None.
		Maryland	
Baltimore Harbor and Channels	14,036,000	15,214,000	Dredge navigation channels.
Nanticoke River, Northwest Fork	0	240,000	None.
Ocean City Harbor Inlet and Sinepuxent Bay	0	220,000	None.
Wicomico River	1,080,000	500,000	None.
Cape Cod Canal	11,511,000	Massachusetts 8,869,000	Annual maintenance of navigation and recreation features and highway and railroad bridges.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

#### 1. Navigation (Cont'd)

STATE	ESTIMATED OF	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2005 (\$)	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-)
			Major Maintenance items budgeted in FY 2006
			(Threshold \$ 1,000,000)
	N	Massachusetts (cont'o	d)
Weymouth-Fore River	0	3,774,000	Dredge 35 ft main ship channel.
		New Jersey	
Barnegat Inlet	0	95,000	None.
Zamogat mot	· ·	33,333	110110.
Cold Spring Inlet	329,000	540,000	None.
D. I. D. I. O. I.	40.000	40.000	A.I.
Delaware River at Camden	19,000	10,000	None.
Delaware River, Philadelphia	18,551,000	20,465,000	Dredge navigation channel and maintain dredged
to the Sea	. 0,00 . ,000	_0,.00,000	material disposal site
			·
Delaware River, Philadelphia	3,193,000	720,000	Dredge navigation channel.
to Trenton			
Manasquan River	177,000	510,000	None.
Manasquan ravei	177,000	310,000	None.
Newark Bay, Hackensack,	112,000	8,120,000	Dredge navigation channel.
& Passaic Rivers			
D 11 D1	_	0.500.000	
Raritan River	0	2,500,000	None.

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

#### 1. Navigation (Cont'd)

<u>STATE</u>	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
<u>Project Name</u>	<u>FY 2005 (\$)</u> <u>Total</u>	<u>FY 2006 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
		New Jersey (cont'd)	)
Raritan River to Arthur Kill Cut-Off	0	150,000	None.
Shark River	94,000	80,000	None.
		New York	
Browns Creek	701,000	100,000	None.
Buttermilk Channel	1,468,000	60,000	None.
Eastchester Creek	0	100,000	None.
East River	346,000	1,350,000	Dredge navigation channel.
East Rockaway Inlet	2,508,000	140,000	None.
Fire Island Inlet to Jones Inlet	169,000	220,000	None.
Flushing Bay and Creek	0	150,000	None.
Great South Bay	0	200,000	None.
	-	7 February 2005	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

### 1. Navigation (Cont'd)

STATE	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
Ducia et Nama	<u>FY 2005 (\$)</u>	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006
			(Threshold \$ 1,000,000)
		New York (Cont'd)	
Hudson River (Maintenance)	1,875,000	1,794,000	Dredge navigation channel
Hudson River (O&C)	1,821,000	1,090,000	None.
Hudson River Channel	0	350,000	None
Jamaica Bay	2,057000	140,000	None.
Long Island Intracoastal Waterway	0	200,000	None.
Moriches Inlet	46,000	80,000	None.
New York and New Jersey Channels	3,330,000	7,200,000	Dredge navigation channel.
New York Harbor	3,960,000	3,410,000	Dredge navigation channel.
Shinnecock Inlet	94,000	120,000	None.
		Pennsylvania	
Schuylkill River	1,384,000	70,000	None.
	7	February 2005	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

#### 1. Navigation (Cont'd)

<u>STATE</u>	ESTIMATED O	BLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2005 (\$)</u> <u>Total</u>	<u>FY 2006 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
Atlantic Intracoastal Waterway (ACC)	1,809,000	<b>Virginia</b> 1,670,000	Operate bridge, road and locks.
Atlantic Intracoastal Waterway (DSC)	734,000	275,000	Reduction in lock and spillway operation.
Chincoteague Inlet	0	900,000	None.
James River Channel	3,726,000	3,295,000	Dredge navigation channel.
Norfolk Harbor	9,909,000	11,203,000	Dredge navigation channel, raise dikes and levees at Craney Island
Rudee Inlet	467,000	635,000	None.
Tangier Channel	0	600,000	None.
Waterway on the Coast of Virginia	100	200,000	None.
Other Projects Maintained Periodically	26,248,000	0	
Total-Channels & Harbors	129,338,000	114,446,000	
b. Locks and Dams: NONE TOTAL NAVIGATION	129,338,000	114,446,000	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

#### 2. Flood Control

#### a. Reservoirs

The budget estimate of \$47,163,000 provides for the operation of 51 flood control reservoirs. Requirements include: operation and ordinary maintenance of project facilities, facility security; labor, supplies, materials, and parts for day-to-day functioning; periodic maintenance, repairs and replacements; and contract law enforcement. The requested amount also includes application of special recreation use fees for recreation areas.

STATE	ESTIMATED OB	BLIGATIONS	Reason for Change and Major Maintenance Items
Drainat Nama	FY 2005 (\$)	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006
			(Threshold \$ 1,000,000)
		Connecticut	
		Connecticut	
Black Rock Lake	393,000	592,000	None.
Colebrook River Lake	513,000	583,000	Perform endangered species inventory in FY06.
	,		
Hancock Brook Lake	273,000	599,000	Perform periodic inspection in FY06.
Hop Brook Lake	934,000	1,005,000	None.
Mansfield Hollow Lake	555,000	535,000	None.
Northfield Brook Lake	394,000	527,000	Perform periodic inspection in FY06.
Thomaston Dam	584,000	951,000	Perform periodic inspection and seepage analysis in FY06.
West Thompson Lake	545,000	724,000	Perform periodic inspection in FY06.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

### 2. Flood Control (Cont'd)

<u>STATE</u>	ESTIMATED OBL	IGATIONS	Reason for Change and Major Maintenance Items
	FY 2005 (\$)	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006
			(Threshold \$ 1,000,000)
		Maryland	
Jennings Randolph Lake	2,525,000	1,907,000	Perform repairs to road embankment; reevaluate stilling basin; security and periodic inspection in FY 05.
		Massachusetts	
Barre Falls Dam	645,000	637,000	None.
Birch Hill Dam	555,000	607,000	None.
Buffumville Lake	570,000	592,000	None.
Charles River Natural Valley Storage Area	294,000	312,000	None.
Conant Brook Lake	200,000	362,000	Perform Periodic Inspection and intensive cultural resource inventory in FY06.
East Brimfield Lake	437,000	458,000	None.
Hodges Village Dam	613,000	591,000	Perform periodic inspection in FY05.
	7	February 2005	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

### 2. Flood Control (Cont'd)

STATE  Project Name	ESTIMATED OBL FY 2005 (\$) Total	IGATIONS FY 2006 (\$) Total	Reason for Change and Major Maintenance Items Reason for change in Operations from FY 2005 to FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006
	М	assachusetts (Cont	(Threshold \$ 1,000,000)
Knightville Dam	530,000	677,000	None.
Littleville Lake	472,000	541,000	None.
Tully Lake	535,000	595,000	None.
West Hill Dam	698,000	798,000	None.
Westville Lake	540,000	579,000	Perform Periodic Inspection in FY06.
		New Hampshire	
Blackwater Dam	585,000	644,000	None.
Edward MacDowell Lake	500,000	555,000	None.
Franklin Falls Dam	685,000	768,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

### 2. Flood Control (Cont'd)

STATE	ESTIMATED	OBLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2005 (\$)</u> Total	<u>FY 2006 (\$)</u> Total	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-)
	<u></u>	<u> </u>	Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
		New Hampshire (Cont'd)	
Hopkinton-Everett Lakes	1,115,000	1,228,000	None.
Otter Brook Lake	615,000	806,000	None.
Surry Mountain Lake	606,000	736,000	Replace piezometer and conduct dwarf wedge mussel study and wetland habitat inventory in FY06.
		New York	
Almond Lake	503,000	509,000	None
Arkport Dam	268,000	294,000	None.
East Sidney Lake	442,000	517,000	Perform periodic inspection and maintenance of relief well in FY 06.
Whitney Point Lake	547,000	678,000	Perform periodic inspection in FY 06.
		Pennsylvania	
Alvin R. Bush Dam	582,000	727,000	Perform instrumentation replacement and periodic inspection of intake tunnel in FY 06.
Aylesworth Creek Lake	194,000	251,000	Perform instrumentation replacement in FY 06.
		7 February 2005	9

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

### 2. Flood Control (Cont'd)

<u>STATE</u>	ESTIMATED O		Reason for Change and Major Maintenance Items
Project Name	<u>FY 2005 (\$)</u> <u>Total</u>	<u>FY 2006 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-)
<u> </u>	<u>10ta.</u>	<u>10ta.</u>	Major Maintenance items budgeted in FY 2006
			(Threshold \$ 1,000,000)
		Pennsylvania (Cont'	'd)
Beltzville Lake	913,000	1,026,000	None.
Blue Marsh Lake	2,584,000	2,662,000	None.
Cowanesque Lake	1,907,000	2,793,000	None.
Curwensville Lake	679,000	717,000	Perform dam embankment evaluation and repair data acquisition System in FY 06.
Foster Joseph Sayers Dam	719,000	745,000	Perform periodic inspection of intake tunnel in FY 06.
Francis E. Walter Dam	730,000	731,000	None.
General Edgar Jadwin Dam and Reservoir	469,000	249,000	None.
Prompton Lake	535,000	483,000	None.
Raystown Lake	4,573,000	5,449,000	None.
Stillwater Lake	359,000	386,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

### 2. Flood Control (Cont'd)

STATE	ESTIMATED C	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2005 (\$)	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-)
			Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
			(Tilleshold \$ 1,000,000)
		Pennsylvania (Cont'	d)
Tioga-Hammond Lakes	2,506,000	3,365,000	None.
York Indian Rock Dam	558,000	556,000	None.
		Vermont	
Ball Mountain Lake	948,000	801,000	None.
North Hartland Lake	625,000	706,000	None.
North Springfield Lake	805,000	892,000	None.
Townshend Lake	720,000	786,000	None.
Union Village Dam	571,000	684,000	Conduct external environmental compliance review in FY06.
		Virginia	
Gathright Dam and Lake Moomaw	1,544,000	2,084,000	None.
Total reservoirs	41,193,000	47,163,000	
		7 February 2005	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

- 2. Flood Control (Cont'd)
  - a. Reservoirs (Cont'd)

#### **Scheduling Reservoir Operations**

The \$163,000 requested in FY 2006 supports preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions, and the issuance of gate regulation instructions as necessary at 2 non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

<u>STATE</u>	ESTIMATED OB		Reason for Change and Major Maintenance Items
Project Name	<u>FY 2005 (\$)</u> <u>Total</u>	<u>FY 2006 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
Maryland	90,000	97,000	None.
Pennsylvania	52,000	66,000	Revise reservoir regulation manual in FY 06.
Total Scheduling of Reservoir Operations	142,000	163,000	
Total Reservoirs and Scheduling of Reservoir Operations	41,335,000	47,163,00	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

#### 2. Flood Control (Cont'd)

#### b. Channel Improvements

The budget estimate of **\$1,992,000** provides for the essential annual requirement of 4 local flood protection projects, including **10** separate units of the Southern New York projects.

STATE	ESTIMATED O	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2005 (\$)	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-)
			Major Maintenance items budgeted in FY 2006
			(Threshold \$ 1,000,000)
		Connecticut	
Stamford Hurricane Barrier	433,000	417,000	Perform periodic inspection in FY05.
		Mondond	
Cumberland, MD and Ridgeley, WV	237,000	<b>Maryland</b> 126,000	Engineering and design for repair of Wills Creek in FY 05.
Cumberialia, MD and Magerey, VVV	231,000	120,000	Engineering and design for repair of wills ofeck in 1 1 00.
		Massachusetts	
New Bedford, Fairhaven &	411,000	337,000	None.
Acushnet Hurricane Barrier	,		
		Mann Jamaan	
		New Jersey	
Passaic River Flood Flood Warning System	403,000	450,000	None.
•			
		New York	
Southern New York Projects	747,000	662,000	None.
Total Channel Improvements	2,231,000	1,992,000	

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

#### 2. Flood Control (Cont'd)

#### b. Channel Improvements (Cont'd)

#### Inspection of Completed Works and Miscellaneous Maintenance

The **\$1,093,000** requested in FY 2006 supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, and floodwalls. drainage structures and pumping plants.

STATE	ESTIMATED OBI	LIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2005 (\$)</u> <u>Total</u>	FY 2006 (\$) Total	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
Connecticut	34,000	79,000	Increase in projects to be inspected.
District of Columbia	8,000	9,000	None.
Maine	10,000	21,000	Increase in projects to be inspected.
Maryland	34,000	36,000	None.
Massachusetts	108,000	114,000	None.
New Hampshire	11,000	12,000	None.
New Jersey	57,000	106,000	Increase in projects to be inspected.
New York	225,000	309,000	Increase in projects to be inspected.

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**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

#### 2. Flood Control (Cont'd)

#### **b. Channel Improvements** (Cont'd)

#### Inspection of Completed Works and Miscellaneous Maintenance (continued)

STATE	ESTIMATED OF	BLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	<u>FY 2005 (\$)</u> <u>Total</u>	<u>FY 2006 (\$)</u> <u>Total</u>	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-) Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
Pennsylvania	116,000	188,000	Increase in projects to be inspected.
Rhode Island	9,000	15,000	Increase in projects to be inspected.
Vermont	40,000	45,000	None.
Virginia	187,000	127,000	Decrease in projects to be inspected.
West Virginia	33,000	32,000	None.
Total Inspection and Miscellaneous Maintenance	872,000	1,093,000	
Total Channel Improvements, Inspections and Miscellaneous Maintenance	3,103,000	3,085,000	
TOTAL-FLOOD CONTROL	44,438,000	50,248,000	

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APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

#### 3. Multiple Purpose Power Projects - NONE

#### 4. Protection of Navigation

The budget estimate of \$6,295,000 provides for accomplishing the removal of drift and debris.

STATE	ESTIMATED OF	BLIGATIONS	Reason for Change and Major Maintenance Items
Project Name	FY 2005 (\$) Total	FY 2006 (\$) Total	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-)
-		_	Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
Collection and Removal of Drift:			
Politimore Herber Drift Removal MD	484 000	226 000	Decrease in level of service.
Baltimore Harbor Drift Removal, MD	484,000	326,000	Decrease in level of service.
New York Harbor Drift Removal, NY & NJ	5,136,000	4,400,000	Decrease in level of service.
Potomac and Anacostia River Drift Removal, DC	1,064,000	744,000	Decrease in level of service.
Hampton Roads Drift Removal, VA	1,043,000	825,000	Decrease in level of service.
Prevention of Obstructive and Injurious Deposits	1,545,000	0	Activities to be funded with project funds.
Total Protection of Navigation	9,272,000	6,295,000	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

#### 4. Protection of Navigation (Cont'd)

#### a. Project Condition Surveys

The **\$8,872,000** requested in FY 2006 supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the budget request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that the users can be advised of channel conditions and future maintenance can be scheduled.

STATE	ESTIMATED O	BLIGATIONS	Reason for Change and Major Maintenance Items
	FY 2005 (\$)	FY 2006 (\$) Total	Reason for change in Operations from FY 2005 to FY 2006 (10% +/-)
Project Name	<u>Total</u>		
			Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
Connecticut	1,410,000	1,000,000	Perform demonstration project in FY05.
Delaware	76,000	86,000	None.
District of Columbia	34,000	37,000	None.
Maine	613,000	866,000	Variation in survey requirements.
Disposal Area Monitoring, ME	1,318,000	1,106,000	Reduction in monitoring requirements.
Maryland	353,000	379,000	None.
Massachusetts	1,433,000	1,300,000	None.
New Hampshire	325,000	300,000	None.

APPROPRIATION TITLE: Operation and Maintenance, General FY 2006 (Cont'd)

### 4. Protection of Navigation (Cont'd)

### a. Project Condition Surveys (Cont'd)

<u>STATE</u>	ESTIMATED OB	LIGATIONS	Reason for Change and Major Maintenance Items
	<u>FY 2005 (\$)</u> <u>Total</u>	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name		<u>Total</u>	FY 2006 (10% +/-)
			Major Maintenance items budgeted in FY 2006 (Threshold \$ 1,000,000)
New Jersey	1,584,000	1,675,000	None.
	1,001,000	1,010,000	110.110.1
New York	910,000	930,000	None.
New Tork	310,000	330,000	None.
Rhode Island	393,000	400,000	None.
Tribue island	333,000	400,000	None.
Virginia	721,000	793,000	None.
virginia	721,000	193,000	NOHE.
Other surveys conducted periodically	987,000	0	
Total Project Condition Survey	10,157,000	8,872,000	

**APPROPRIATION TITLE:** Operation and Maintenance, General FY 2006 (Cont'd)

#### 4. Protection of Navigation (Cont'd)

#### b. Surveillance of Northern Boundary Waters.

The **\$17,000** requested in FY 2006 supports meeting US obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.

STATE	ESTIMATED OBLIGATIONS		Reason for Change and Major Maintenance Items
	FY 2005 (\$)	FY 2006 (\$)	Reason for change in Operations from FY 2005 to
Project Name	<u>Total</u>	<u>Total</u>	FY 2006 (10% +/-)
			Major Maintenance items budgeted in FY 2006
			(Threshold \$ 1,000,000)
		Maine	
International St. Croix	16,000	17,000	None.
River Board			
Total Surveillance of	16,000	17,000	
Northern Boundary Waters	·	·	
Total Protection of Navigation	19,475,000	15,184,000	
Project Condition Survey	10,110,000	,	
& Surveillance of Northern Boundary Waters			
GRAND TOTAL-NORTH ATLANTIC DIVISION	192,586,000	179,878,000	
	,,	,	